PRACTICAL PHYSIOLOGY.

Lectures ON EXPERIMENTAL PHYSIOLOGY.

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LECTURE VI.

INNERVATION (CONTINUED).

GENTLEMEN,—Let me remind you that the functions of centrifugal or efferent nerves may be—1, motor; 2, secretory; 3, trophic. Those of centripetal or afferent nerves may be—1, sensory; 2, excitant for reflex actions; 3, inhibitory. And that possibly all these functions are discharged by intercentral nerves. (See Lecture V.)

Motor Nerves.

I need show you nothing further regarding motor nerves. You have often seen the leg of a frog thrown into convulsions by irritating the sciatic nerve. Last day you saw the diaphragm convulsed by stimulation of the phrenic. These are examples of *spinal* nerves. But you have also seen that *sympathetic* nerves may have a motor function. You witnessed experiments which showed that the cervical sympathetic is motor as regards the radiating muscular fibres of the iris and the walls of bloodvessels. We saw the pupil dilate and bloodvessels contract when the nerve was excited. The innervation of the vascular system will occupy us on another occasion; meanwhile let me say that the motor nerves for the bloodvessels are termed **vaso-motor**, while those for the heart are termed **cardio-motor nerves**. They cause contraction of the heart and bloodvessels; they belong to the sympathetic system. So much for motor nerves. I shall now proceed to show you that there are nerves which, when stimulated, cause glands to secrete.

Secretory Nerves.

The glands which serve most conveniently for this demonstration are the salivary glands. The dog which you see on the table is thoroughly narcotised by opium. In order to do this I simply injected some tincture of opium into its external jugular vein. I have inserted a long glass tube into the duct of one submaxillary gland. I have exposed the chorda tympani nerve going to the gland, and have also separated the cervical sympathetic nerve from the vagus below the superior cervical ganglion. Let me tell you that in the dog and cat the sympathetic and vagus form a single trunk in the neck, instead of two, as in man and in the rabbit. In the cat it is easy to separate the two nerves; but in the dog it is much more difficult, excepting near the superior cervical ganglion, where the isolation may be effected easily enough with a little care. I have done all these things beforehand, because they require nearly half an hour, and the dissection could not have been seen by more than two or three of you. If you come and examine the parts exposed, you will have no difficulty in understanding the simple dissection which I have made. When you make it, just remember that you have to deal with things which will not bear any but the most delicate handling. I now divide the chorda close to the gustatory nerve, and the sympathetic about an inch below the superior cervical ganglion. These nerves are both secretory nerves for the submaxillary gland. We shall now stimulate them in order to see the effect of their action upon the secreting structure. I make the induced currents from Du Bois Reymond's machine (Lecture II.) just strong enough to be felt by the tongue. Just glance at the gland and observe the amount of vascularity. I now stimulate the distal end of the chorda tympani. Observe how rapidly the long glass tube is becoming filled with saliva. ..... You see that it is now dropping with considerable rapidity from the end of the tube. Those of you who are near enough may observe how much more vascular the gland is now as compared with what it was before we began the stimulation of the nerve. I now stop the irritation. The effect continues for a little while: that we shall allow to pass off. ..... I now stimulate the upper end of the cervical sympathetic. You notice that the irritation causes the saliva to drop from the tube, but not nearly so fast as when the chorda was irritated. Notice how different is the vascularity of the gland during this irritation as compared with the former. It is far less now than it was during the chorda stimulation. It is even less than it was previous to the sympathetic irritation. We shall pursue this subject further when we study secretion more particularly; meanwhile I would point out that nerves may cause a gland to secrete, or at any rate may increase its secretion, probably by an action on its vessels, and also by an action on its secreting cells. If the nerves cause vascular dilatation, it is easily conceivable that the increased amount of blood with which the gland is supplied may have an important influence on the amount of its secretion. In the kidney, perhaps, more than in any other gland—as we shall afterwards see—do changes in vessels and in the amount of blood regulate the amount of secretion. In the salivary glands, however, the increased secretion which follows irritation of the sympathetic takes place in spite of *contraction* of the bloodvessels brought about by the nerve. On this account the increased secretion is attributed to an action of the nerve upon the secreting cells; the more so because an active proliferation of the gland-cells takes place during the irritation of the nerve, and the saliva in consequence becomes loaded with salivary corpuscles. The bloodvessels of the gland are dilated by irritating the chorda; the saliva secreted during the irritation is thin and watery, unlike the sympathetic saliva, which is tough and viscous. Does the chorda saliva result simply from dilatation of vessels and not from a direct influence of the nerve upon the secreting plasm? No! The mere dilatation of vessels and increased supply of blood will not explain it. During irritation of the chorda the pressure of the saliva within the duct of the gland can rise above that of the blood within the arteries. Hence the secretion cannot be regarded as a mere filtration through the walls of the capillaries. Here, as in the case of the sympathetic, the nerve irritation occasions an active proliferation of the gland-cells. How the nerve influence gets to the secreting plasm is a question to which we dare not as yet give a definite answer. Pflüger says he has traced nerves into gland-cells in both the submaxillary gland and liver. Other observers have not, however, been able as yet to confirm this.

Trophic Nerves.

Some authorities oppose the idea of trophic or nutrient nerves; that is, of nerves which preside over the nutrition of the textures. They point to plants, and animals with no nerves, and say, inasmuch as nutrition goes on well enough in these cases, why should nerve influence have anything to do with the nutrition of a tissue in animals possessed of a nervous system? I shall not waste your time in replying to an argument so fallacious, for you will presently see that there is reason for believing that nerves influence the nutrition of some textures at any rate. The amount of blood supplied to a part has probably an important influence upon its nutrition. Certain nerves regulate to a large extent the blood-supply. In this way they may therefore influence nutrition. These nerves have, however, only an indirect influence upon nutrition; they are not trophic or nutrient nerves in the sense to which those terms are generally restricted in this connexion. By trophic nerves we mean those which have a direct action upon the tissue. Hermann, in his Text-book of Physiology, says that the only unequivocal fact in favour of a system of trophic nerves is one concerning the nutrition of the nerves themselves—to wit, that when a nerve is cut off from its centre it degenerates—e.g., if the posterior root of a spinal nerve be divided on the distal side of the intervertebral ganglion, the part (peripheral) cut off from the ganglion degenerates; that (central) in connexion with it preserves its integrity. If, again, it be cut between the cord and the ganglion the portion (central) cut off from the ganglion degenerates; while that (peripheral) still joined to the ganglion remains intact. These experiments we owe to the late Dr. Augustus Waller. The results appear to show that the intervertebral ganglia are trophic centres, which preside over the nutrition

of the afferent fibres of the spinal nerves. Similar experiments seem to show that the trophic centres for the efferent fibres are in the spinal cord. Perhaps you may feel inclined to say, "I don't see how these facts show that the degenerations are due to the loss of a trophic influence exerted by certain nerve-cells. Why may not the results be due to interference with the function of the nerve-fibres, or a disturbance in the vascular supply to certain parts of the nerves?" Well, it is true that if you keep a nerve at rest for a long time it degenerates; but this fails to afford an explanation of why it is that the *peripheral*, and not the *central*, end of the posterior sensory root of the spinal nerve degenerates when a cut is made on the peripheral side of the intervertebral ganglion. If any part of the nerve is kept in action after such a lesion it ought to be the part on the peripheral side of the ganglion; that is, the part cut off from it—the very part which degenerates. Touching the effect of the lesion on the blood-supply, you will see how difficult, nay, indeed, impossible, it would be to account for the results on this ground, when I simply say that division of both roots of the spinal nerve *close* to the cord, let us say, produces, first, degeneration of the *afferent* fibres *inside the cord*, while the *efferent* fibres in the *same situation* remain unchanged; second, degeneration of the *efferent* fibres outside the cord, while the *afferent* fibres remain unchanged. I cannot see how such results can be explained by supposing that the lesion produces a vascular disturbance which is not common to both sets of fibres. The great and indeed almost the only vaso-motor centre in the body appears to be in the medulla oblongata. The vaso-motor nerves pass down through the cord, and leave it with the spinal nerves. When, therefore, we divide a spinal nerve in the manner I have just described, we paralyse the vessels on the peripheral side of the section, just as much for the afferent as for the efferent nerve-fibres. It seems to me that we cannot regard hyperæmia of the nerve as the cause of the degeneration when we find side by side degenerated efferent nerve-fibres and unchanged afferent fibres. We are therefore, I think, compelled to believe that at any rate some nerve-cells exercise a trophic influence upon their nerve-fibres. This degeneration of nerve-fibres, produced by cutting them off from their trophic centres, is an important matter from more than one point of view. It has an especial importance in experimental physiology. We can use it as a mode of tracing the distribution of nerves. Indeed, it is commonly spoken of as the Wallerian method of doing this. In illustration of its value I would allude to the dispute as to whether the chorda tympani ends in the submaxillary ganglion, or sends a branch to the tongue. Vulpian divided the nerve some distance behind the ganglion, permitted the animals to live for some time, and then submitted the parts concerned to a microscopical investigation. He found numerous fibres in a state of fatty degeneration proceeding to the submaxillary ganglion, but none going to the tongue or elsewhere. He therefore concluded that the nerve ends entirely in the ganglion. In this connexion be good enough to very particularly remember that degeneration of a nerve may result *not only from the suspension of some trophic influence, but also, it would appear, from pure inaction of the tissue.* You will fall into confusion if you fail to observe this point. We, however, want to know more regarding it. We want a precise answer to this question. To what extent can the degeneration of a nerve *cut off from its trophic centre* be prevented by exercising it?

But it appears to me that we have additional examples of trophic nerves in the filaments of the chorda tympani and sympathetic which preside over the salivary secretion. We have seen that everything points to this, that these nerves cause secretion by acting on the secreting plasm directly. They cause increased growth of the cell elements. The influence appears to be trophic. There are many other facts which have been advanced in support of the idea of trophic nerves ruling nutrition everywhere—e.g., inflammation of the eye after section of the ophthalmic branch of the fifth nerve. True, this has been ascribed by Snellen and Büttner to loss of sensibility, and the consequent entrance of foreign matters within the eyelids. As shown by Meissner and Schiff, however, the inflammation follows a partial section of the nerve, which leaves the sensory fibres intact. Quite recently, Sinitzen has found that the inflammation does not follow if the bloodvessels of the eye be paralysed by removal of the superior cervical ganglion. It therefore seems probable that a vascular disturbance, and no mere interference with trophic influence, is the cause of the perverted nutrition which follows the lesion I have just mentioned. This difficulty of separating the vascular from the trophic disturbance in such cases is the cause of the obscurity which yet hangs over many of the facts regarding trophic nerves. Much yet requires to be done ere we can judge of the extent to which nerves influence the nutrition of the tissues generally. So much for centrifugal nerves. Let us now study in a general way those which are centripetal.

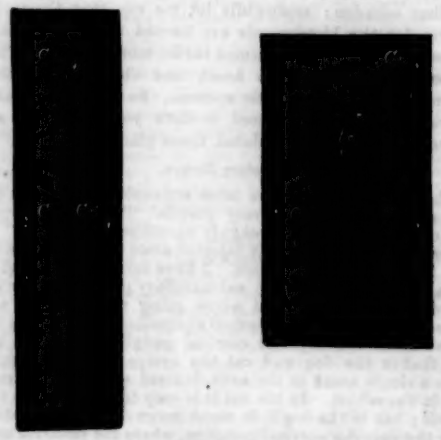
Sensory Nerves.

[Under this head some general questions regarding sensory nerves were discussed, and the mode of estimating the amount of ordinary sensibility in a part was demonstrated. It was shown that this may be done by Weber's method of ascertaining how close the points of a pair of compasses may be approximated and yet recognised as two distinct points when applied to a part endowed with tactile sense. It was further pointed out, however, that when it is our object merely to compare the sensibility on one side of the body with that on the other, we can most readily arrive at a reliable conclusion by stimulating the skin—e. g., by means of faradic currents.]

Reflex Action.

The second division of centripetal nerves consists of those which convey influences to excite reflex action. By reflex action we mean an involuntary action which results from the excitation of a centrifugal nerve by an influence transmitted to it through a centripetal nerve. We cannot as yet be certain of the nerve apparatus concerned in reflex action; but the diagrams which I shall now draw represent the probable nerve arrangements.

FIG. 17. FIG. 18.



Figs. 17 and 18. Two diagrams of the probable nerve arrangements concerned in reflex actions.—*C f*, Centrifugal nerve. *C p e*, Exciting centripetal nerve. *C p i*, Inhibitory centripetal nerve. *I c e*, Intercentral nerve conveying the exciting influence from the afferent to the efferent cell. The arrows indicate the directions in which the influences pass. (The action of the fibres *C p i*, is discussed further on.)

Possibly there are reflex actions in which only a single nerve-cell is concerned (Fig. 17), both centripetal and centrifugal nerve-fibres being connected with this cell. We are led to suppose that this is the case from observing that in the spinal cord of some fishes—e. g., the salmon—afferent and efferent nerves are both connected with the same cell. In the higher animals, however, these nerves appear to be generally connected with different cells. Hence I shall make another diagram (Fig. 18), in which we shall join the afferent nerve (*C p e*) to one cell, and the efferent nerve to another. We must, of course, put in an intercentral fibre to connect the two cells. I now put arrows near the nerves in order that you may see at a glance how the influence travels. You have only to study them for a moment in

order to understand why this class of actions has been termed *reflex*. By some physiologists these actions are also termed *automatic*; but by others the term automatic is applied only to actions which result from the apparently spontaneous evolution of energy within the motor cells, there being no centripetal stimulus, as in the case of reflex action. To avoid confusion, I advise you to always employ the term *reflex* instead of *automatic* when you mean *reflex action*.

The centripetal influences which cause reflex action may start from almost any tissue. The skin, mucous membranes, and muscles are perhaps their most common sources. The centrifugal nerve-fibres may convey their influences to (1) contractile tissues, in which case the action is designated *diastaltic, excito-motor*, or reflex motor; or (2) glands may be the termini of the efferent influences, in which case the action is termed *excito-secretory*, or reflex secretory. These two reflex actions are certain, but much obscurity hangs over a third class termed *excito-nutrient* or *excito-trophic* actions—that is to say, actions in which increased nutrition of a tissue is brought about reflexly. All that I have said regarding trophic nerves applies equally to *excito-trophic* action. Excito-secretory actions are to a large extent excito-nutrient actions, because here in some cases—e.g., in the salivary glands—increased growth of a tissue is brought about reflexly. The growth of the beard and mammæ at puberty, and the enlargement of the latter during gestation, are possibly also examples of excito-nutrient action, though here we encounter the difficulty of deciding whether in these cases the increased growth of tissue is due to a reflex trophic stimulation of the tissue, to dilatation of the vessels brought about by an inhibitory influence whose mode of operation I shall afterwards explain, or to a peculiar state of the blood.

It is only since the time of Marshall Hall that physiologists have fairly recognised the distinction between voluntary and reflex actions. Several physiologists, long before Hall, hinted strongly at this distinction; but Hall was the first to place the matter in the light in which we regard it to-day. Strange to say, he arrived at a conclusion which some of his facts by no means warranted. The conclusion happens to be right, but I do not know that he would ever have come to it if he had examined his facts more carefully. You will readily appreciate my meaning when I show you the following experiment. Observe this frog. It is regarding our manœuvres with a somewhat lively air. Now and then it gives a jump. What the precise object of its leaps may be I dare not pretend to say; but probably it regards us with some apprehension and desires to escape. I touch one of its toes, and you see it resents the molestation in a very decided manner. Why does it so struggle to get away when I pinch its toes? Doubtless, you will say, because it feels the pinch and would rather not have it repeated. I now behead the animal with the aid of a sharp chisel..... The headless trunk lies as though it were dead. The spinal cord seems to be suffering from shock. Probably, however, it will soon recover from this.....Observe that the animal has now *spontaneously* drawn up its legs and arms, and it is sitting with its neck erect just as if it had not lost its head at all. I pinch its toes, and you see the leg is at once thrust out as if to spurn away the offending instrument. Does it still feel? and is the motion still the result of volition? Marshall Hall said *No*. Pflüger, Lewes, and Goltz would have us say *Yes*. According to Hall, *the decapitated animal does not move* unless it be excited from without in some way. I am at a loss to conceive how Hall arrived at this conclusion. I shall never forget the lesson I received regarding this matter at the first demonstration I ever gave on reflex action. Having been taught that Hall had made this statement, and that on this fact he had based the distinction between reflex and voluntary action, I did not doubt that he was right. So I decapitated my frog, and said, "We shall now see that the animal will remain perfectly at rest until its afferent nerves are stimulated." These unlucky words had scarce been uttered when, to my dismay, and the amusement of all who heard me, the headless frog, without any apparent provocation, suddenly bounded from the table, and thereby contradicted both Marshall Hall and me in a manner which was decided enough. That was in 1866. In the same year Professor Norris observed this phenomenon, and I have often since that time repeated the observation, *that a decapitated frog may move without any apparent cause of excitement.* The only explanation which I can offer of Hall's mistake is that he may have operated on weak instead of strong, healthy frogs. In the former these spontaneous movements are not so apt to occur.

But though Hall's experiments regarding reflex action were imperfect, he undoubtedly made a happy hit when he separated the class of reflex actions from those which are voluntary. We shall presently study spinal reflex actions more particularly; but, seeing that the involuntary nature of some of these actions is disputed, I would first of all direct your attention to reflex actions which all admit to be involuntary. Secretions are often affected by certain thoughts, but they are nevertheless purely involuntary. The abundant flow of saliva which follows the introduction into the mouth of such substances as ether and vinegar, is due to an influence passing from the oral mucous membrane through branches of the fifth and glosso-pharyngeal nerves to the submaxillary ganglion and medulla oblongata, and from thence to the salivary glands. The nerve-centres are in the medulla and submaxillary ganglion; the centripetal nerves are in this case the fifth and glosso-pharyngeal; while the centrifugal nerves are the chorda tympani, and possibly the sympathetic. That is an example of an excito-secretory action. These reflex secretory actions were first pointed out by Dr. Campbell, of America, after Marshall Hall had written upon *excito-motor* actions. We have an excellent example of a pure excito-motor act in the passage of the food through the œsophagus. This movement is quite independent of sensation and volition. The influence is produced by the contact of the food with the mucous membrane of the gullet. The nerve-centre is in the medulla, and the centripetal and centrifugal nerves are both contained in the œsophageal branches of the vagus. Destruction of the medulla, or section of the vagi above the origin of the œsophageal nerves, completely prevents the movement. I might multiply similar examples, but I refrain from so doing as I am anxious to return to the case of those movements which we observed in the decapitated frog. I pinch the foot of the same animal again, and you see that the animal still resents the stimulation. The influence produced by my pinch does not pass to the muscles of the leg directly, but indirectly, through the spinal cord. I thrust a needle down the spinal cord, and disorganise it. ..... The limbs are now flaccid. ..... We may wait as long as we please, but a pinch of the toes will never again cause the limbs of this animal to move. Do not imagine, however, that the shock produced by lacerating the cord has destroyed the contractility of the muscles. I denude the animal, and stimulate the muscles. ..... You see that they have not lost their contractility. Again they contract when I stimulate the motor nerves which supply them, showing that the *motor* nerves, at any rate, have not lost their excitability. I have no means now of proving the same fact regarding the afferent nerves, but we may safely conclude that what is true of the efferent in this respect is also true of the afferent fibres, and therefore that we now fail to obtain excito-motor action because of the destruction of the spinal cord.

I take another frog. In this case I open the cranium and remove the brain and medulla oblongata. I do this instead of cutting off the head, in order to avoid hæmorrhage as much as possible. I thrust a pin through the nose, and hang the animal thereby to a support so that it can move its pendant legs without any difficulty. ..... I gently pinch the toes: ..... the leg of the same side is pulled up. ..... I pinch the same toes more severely: ..... both legs are thrown into motion. It is generally observed that if the toes be slightly irritated, the leg on the same side is moved; if the irritation is more severe, both legs are moved; when it is still stronger, the arms also are moved. The motor nerves of the segment of the cord whose afferent nerves are stimulated are most affected, but the influence may extend to the motor nerves of the whole cord. The movements are not, however, very vigorous. In fact, this mechanical irritation does not produce a very marked effect. The cutaneous nerves of the frog are extremely sensitive to acids; so I put a drop of acetic acid on the outside of one knee. ..... This, you see, gives rise to most violent movements both of arms and legs; and notice particularly that the animal is using the toes of the leg on the same side for the purpose of rubbing the irritated spot. ..... I dip the whole animal into water in order to wash away the acid, and now it is all at rest again. I put a drop of acid on the skin over the

lumbar region of the spine. ..... Both feet are instantly raised to the irritated spot. The animal is able to localise the seat of irritation. ..... I wash the acid from the back, and I amputate one of the feet at the ankle. ..... I apply a drop of acid over the knee of the footless leg. ..... Again the animal turns the leg towards the knee, as if to reach the irritated spot with the toes; these, however, are not now available. But watch the other foot. The *foot of the other leg* is now being used to rub away the acid. The animal, finding that the object is not accomplished with the foot of the same side, uses the other one. Let me tell you, though, that this part of the experiment often fails to yield this result so clearly as you have just witnessed. Frequently the other foot is moved about without being directed to the very spot where the acid is on the other leg. This interesting experiment was first performed by Pflüger. How shall we interpret the results. On first thought they appear to show not only that a brainless frog can feel, but that it can exercise volitional power. The movements which followed the application of the acid were eminently purposive—that is, directed to the accomplishment of an object; and when this is taken in connexion with the fact that a brainless frog often moves spontaneously, it really looks as if the animal can still voluntarily direct its movements. Lewes, Pflüger, and Goltz do not hesitate to say that it can; but here there is need for much caution, as you will presently see. In man the spinal cord has by accident been divided in several instances. In some cases the part of the spinal cord cut off from the brain has been quite paralysed by the injury. This is scarcely to be wondered at, for in warm-blooded animals generally any injury produces a far deeper effect upon the nervous system than it does in cold bloods. It has happened, however, that after such an injury titillation of the soles of the feet produced violent movements of the legs, which were not only not willed by the individual, but could not, indeed, be prevented by him. Moreover, he was quite unconscious of any irritation applied to the parts supplied with nerves from the paralysed portion of the cord. This fact is by many thought to be sufficient to indicate that the movements which you have seen in the frog are not connected with sensation or volition; but I dare say some of you will not fail to perceive that the experiment on the man is, after all, not so satisfactory as it appears at first sight to be. If we cut the spinal cord away from its connexion with the medulla and brain, it has nothing but the movements of the limbs &c. wherewith to give expression to its condition; it has, as it were, no longer the advantage of a suitable mouth-piece wherewith to inform us of its state. It appears to me that we derive greater assistance in arriving at a right conclusion regarding this matter from a consideration of what passes in the uninjured human body. We frequently perform movements of a highly complex and purposive character without our being conscious of the fact. Indeed, the nerve-centres may become so educated that almost any movement, however complex and however much the result of voluntary effort at one time, may come to be performed unconsciously. We see this in walking, riding, using a walking stick, in reading aloud, and in many other instances. Of all these, reading aloud strikes me as the most remarkable. I dare say many of you must have observed when reading aloud that your mind sometimes wanders into a train of thought very remote it may be from the subject of your book. You go on reading, you turn the leaf when the proper time comes, and a listener may have fully appreciated what you have been saying, although you may have been quite unconscious of the impression produced by the type through the optic nerve, or of the movements necessary in pronouncing the words. Such examples of reflex action should, it seems to me, cause us to hesitate ere we conclude that the movements we have witnessed in the decapitated frog indicate consciousness. I am not prepared to speak dogmatically regarding this point. I admit that many of the movements of decapitated frogs are apparently spontaneous, and that the motions which follow the application of an irritant to the skin often appear to indicate not a little consideration; but apparently spontaneous movements which are not the result of volition often occur in man, and his reflex actions also often appear to indicate not a little thought, although we know that they are non-voluntary. Therefore I think it too hasty to conclude from our present knowledge that the reflex movements of decapitated frogs indicate that the spinal cord is a seat of consciousness.

Inhibitory Nerves.

Inhibitory nerves restrain or diminish action. An excellent example of this kind of nerve influence is to be found in the vagus. The vagus has been exposed in this dog which we used for the salivary experiment. The animal is still deeply narcotised; so, in order to show you the cardiac movements readily I push through the thoracic wall into the chest a fine needle having a straw sealed to its head. You see that every cardiac systole is causing a violent movement of the long straw. Now I divide the vagus about the middle of the neck, and faradise the lower end. The cardiac movements become much slower, and even cease for a time. I shall now open the thorax in order to show you the state of the heart during the nerve irritation...You see that when the heart is stopped it is not thrown into a state of spasm, but into a state of complete relaxation. It is in fact brought to rest. There are inhibitory nerves which produce dilatation of bloodvessels, just as the vagus dilates the heart. These nerves are contained in the vagus, and in the spinal nerves generally; they do not, however, transmit their influence directly to the bloodvessels, as the vagus does to the heart; but these influences are almost always conveyed to the medulla oblongata, or at any rate to the cerebro-spinal axis. We find the probable explanation of this in the fact that the ganglia which immediately preside over the movements of the heart are placed within the heart, while those which rule the bloodvessels are nearly all placed in the medulla. Inhibitory nerves seem always to convey their influences to certain nerve-centres, and they apparently act by diminishing the action of these centres. It has been shown that the vagus is connected with the cells of the intracardiac ganglia. It is therefore highly probable that its inhibitory influence is exercised upon the cells. Indeed, we best understand inhibitory nerve action when we assume that it is an action which retards or altogether arrests the energising of certain nerve-cells. Inhibitory nerves to a large extent regulate reflex actions, and therefore I shall add them to the diagrams which I have made (Figs. 17 and 18). In the nerve mechanism where there is only one cell (Fig. 17), I must of course simply attach the inhibitory fibre (*Cpi*) to that cell; but in the other diagram (Fig. 18), to which cell shall we attach the fibre? I prefer to join it to the motor cell, because in the case of the heart there is reason for believing that the rhythmical action is due to the evolution and periodical discharge of energy from this cell without any evidence of its being always, or indeed generally, due to the influence of the exciting fibres (*Cp* and *Icc*). We can best understand the inhibitory action of the vagus upon the heart by supposing that it acts on the motor cells. The spinal reflex actions seem to be under the influence of inhibitory nerves. If you strike a man, or perhaps simply touch him or speak to him when he is "off his guard," he may instinctively give a sudden start, which a very powerful irritation may fail to call forth if he resolve to control his reflex movements. In this case he can prevent the reflex action, not by producing some opposing movement, but simply by willing that the movement which tends to be produced reflexly shall not take place. Setschenow, from experiments which I shall on a future occasion explain, has shown that the inhibitory centres which preside over spinal reflex actions are placed in the corpora quadrigemina and optic thalami; perhaps also in the cerebral hemispheres. Inhibitory nerves may be voluntary or involuntary. Those connected with the vascular system are purely involuntary; those presiding over the ordinary spinal reflex actions, and over those portions of the brain which are concerned in thought, may be voluntary, and possibly also involuntary. I have just alluded to the inhibition of thought. This is an important point, and worthy of your deepest consideration. When we control our thoughts, words, and deeds, we volantarily exercise an inhibitory power; probably we call into play certain inhibitory centres in the brain. These centres can by exercise attain to great importance. In some individuals they seem to be much more powerful than in others; and one of the earliest signs in many cases of insanity is a diminution in the inhibitory power of these centres. The mind is thereby rendered less able to control the nerve-processes concerned in thought and muscular movement. We have

wandered from mere demonstration to not a little speculation; but if you be induced by what I have said to think deeply over these profoundly interesting points, you will not regret that I have directed your attention specially to them.

CLINICAL ESSAYS.

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No. III.

ON THE RELIEF OF PAIN AND MUSCULAR DISABILITY BY ACUPUNCTURE.

IN the present essay it is my wish to record some facts concerning a method of treatment which, though boasting of great antiquity, and capable at times of doing good service, seems in a great measure to have dropped out of use, or at any rate to be at the present day but little employed or even known in many parts of the kingdom. It has, however, been for years a favourite traditional practice at the Leeds Infirmary.

I do not profess that acupuncture succeeds in one-half, or even in one-third, of the cases in which we use it; neither can I offer more than a conjectural explanation of its mode of action, and a general idea of the cases in which it is likely to succeed. When it does succeed, the relief it gives is almost instantaneous, generally permanent, and often in cases which for weeks or months have run the gauntlet of other treatment without benefit. Let me first illustrate this subject by a few successful cases.

Relief of Muscular Disability by Acupuncture.

CASE 1.—A healthy youth, aged twenty-two, fell from a haystack and dislocated his left shoulder in July, 1870. The dislocation was reduced by manipulation by Mr. Kemp, of Castleford, and then the patient came under my care at the hospital. A month after the injury, on being told to use his arm, he found the shoulder stiff, and the muscles, especially the deltoid, powerless, so that he was not able to raise the elbow more than a few inches from his side. An acupuncture needle was then inserted through the deltoid into the fibrous tissue about the joint until arrested by bone, first on the posterior, then on the anterior part of the shoulder, the needle being left for about one minute in each place. Immediately after the removal of the needle he was able to raise his hand to the height of his shoulder, in five minutes to the height of his head, and in half an hour he could hold it straight up above his head as perfectly as the sound one. There was no relapse of stiffness, and he remains perfectly well. Cases equally striking I have seen many times at the Leeds Infirmary in the hands of the late Mr. Smith, my father, and Mr. Samuel Hey.

CASE 2.—A patient of mine, aged about twenty-three, was pitched off horseback and fell on his shoulder. At the end of a fortnight he was disappointed to find that his shoulder was still disabled and stiff, and painful at one spot near the joint. A needle was then introduced into the painful spot down to the bone. On its withdrawal I told him to use his arm, and, to his surprise, he found that he had regained perfect use of his shoulder, and that all pain had ceased. No further treatment was required.

Relief of Pain by Acupuncture.

CASE 3.—A lady of this town married, and went to live in a midland county. Her first labour was tedious and difficult, and for some reason or other was followed by coccygeal neuralgia. As she had suffered severely for about six months, being rarely able to sit down with comfort, her medical attendant urged her to go up to town to consult a specialist; but as she wished to visit her relatives in Leeds, she put herself under my care. Having examined the coccyx, both externally and by the rectum, without discovering any source of the pain, I plunged an acupuncture needle deeply into the fibrous tissues on each side of the coccyx, occupying about one minute altogether. For three or four hours she suffered pain from the puncture, and then all pain ceased.

The following case was related to me by my father:—

CASE 4.—An elderly gentleman, who had for a long time suffered from pain in the under-surface of the foot, near the os calcis, walked into my father's consulting room, limping. Finding that he had been for some time under treatment by medicine of various kinds without any benefit, my father at once introduced the acupuncture needle; and the patient, before leaving the room, was able to walk perfectly, without any pain or defect in gait.

Another very remarkable case came under my notice in August last.

CASE 5.—Geo. U——, aged nineteen, residing at Barnsley, applied in November last for admission into the Leeds Infirmary on account of the disablement of his right wrist from a sprain five years previously. The sprain was followed by pain and weakness of the arm and hand, which slowly increased until, five months ago, it completely disabled him from work. I found the structures round the joint swollen, the muscles of the forearm wasted, and the fingers so stiff that he could not more than half close the hand, and could hardly have grasped a billiard-ball. An acupuncture needle was thrust deeply into the swollen tissues, first on one side of the joint, then on the other, being held about a minute in each situation. In half an hour he was able to close the fist and touch the palm with the tips of his fingers. Three days later he appeared again, free from pain and able to close the fist, the swelling round the joint having all but disappeared.—Dec. 21st: There is no relapse. He has tried to resume work, but finds it too heavy for his wrist; he is therefore advised to take some lighter employment for a year.

The foregoing facts are sufficient to show that in acupuncture we possess a mode of treatment which occasionally proves to be of great value, and is worth being more extensively known and practised than is the case at present. When, however, we leave the facts, and attempt to indicate the cases to which the treatment is suitable, and to explain how the remedy acts, it must be confessed that we tread on very uncertain ground. It is therefore with some diffidence that I venture to offer the following indication of the kind of cases in which we have most frequently attained success, and to suggest what appears to be a possible and reasonable explanation of results so definite and remarkable.

I. *Cases suitable for Acupuncture.*

1. *Muscular disability.*—Cases in which there has been a bruise of muscle (or nerve), as in a fall on the deltoid; or stretching or tearing of muscle or tendon, as in dislocation of the shoulder; followed by rest (i.e., disuse) of the muscles for two, three, or four weeks, and in which at the period of resuming work the muscles are powerless. After four weeks, it is probable that, the longer the delay, the less chance there is of acupuncture doing good.

2. *Relief of pain.*—My rule is a somewhat artificial one. Whenever a fixed pain has existed for some time, and has resisted ordinary means of relief, general and local, I try acupuncture; and, speaking roughly, out of ten cases, there is a brilliant result in one, improvement in three or four more, and failure in the remainder. The cases in which success most frequently results are those in which there has been an injury or subacute inflammation of fibrous tissue, such as tendon or ligament, as occurs in sprains and some erratic forms of rheumatism.

II. *Mode of Action of Acupuncture.*

1. *In muscular debility.*—Let us consider the condition of the shoulder after reduction of a dislocation of the head of the humerus. Muscles previously in good tone, and in condition for hard work, are suddenly thrown into a state of rest and idleness for three or four weeks. During this period the muscular fibres waste from disuse, and the arteries, having to supply less blood to the diminished bulk of muscle, become proportionally reduced in calibre. Over and above the diminution of calibre proportioned to the reduced muscular bulk, there must be a further diminution from the cessation of the demand for blood for carrying on the active tissue-change which accompanied the active work of the muscles. The arteries, therefore, of the disabled muscles must have become reduced in calibre in a degree greater than would be accounted for by the mere muscular wasting, so as to be capable only of nourishing the wasted muscles *when at rest, and not when at work.* The mere act of will is

then inadequate to force sufficient blood into the muscular fibre to give it tone to act. This defective power of will the stimulus of acupuncture supplies, by producing a temporary congestion and corresponding increase in the calibre of the vessels and in the blood-supply. Two facts seem to point to this explanation: one, that on puncturing the skin we often find, in the course of a minute or so, an area of redness—i. e., of vascular excitement—of about an inch or more in radius; the other, that the recovery of muscular power is *gradual*, not sudden, beginning immediately after the puncture, and continuing and increasing for twenty or thirty minutes. Moreover a want of power depending upon the wasting of the muscles could not be recovered from in such a short space of time.

2. *In relief of pain.*—The following seems to me a likely explanation of the manner in which pain is relieved by acupuncture. The injury or inflammation of the offending fibrous tissue has produced a defective nutrition of the nerves pervading such tissue. These nerves are *starved* of their proper supply of blood, the vasa nervorum being morbidly contracted from pressure or other cause, and the nerves are ill-nourished and in consequence painful. The needle produces a temporary active congestion—a flushing of the vasa nervorum, and thus acts as a starting-point for improved nerve nutrition and for consequent cessation of pain. Such an explanation of relief of pain by acupuncture seems to me in harmony with the views of the causation of neuralgia discussed by Professor Rolleston in the opening of his address on Physiology at Oxford.

In conclusion, let me refer those interested in the subject of this paper to the article "Acupuncture" in the Cyclopædia of Surgery by the late Dr. Elliotson. I may also add the following from a friend many years my senior, who writes to me: "I remember at the Birmingham Hospital it was all the fashion at one time. We used to stick half-a-dozen needles into the deltoid, e. g., and leave them for a quarter of an hour, with sometimes 'wonderful' results."

Leeds, March, 1871.

ON

THE CONDITION OF THE CIRCULATION IN SCROFULA.

BY WM. KNIGHT TREVES, F.R.C.S.,

VISITING SURGEON, AND LATE RESIDENT SURGEON, TO THE NATIONAL HOSPITAL FOR SCROFULA.

WHILST making these few observations on the condition of the circulation in scrofula, I must, to avoid misunderstanding, briefly explain what I mean by scrofula, and how it is to be distinguished from those pathological conditions which are usually confounded with it. The first and most important of these is tuberculosis; and I must endeavour to draw a distinction between tuberculosis and scrofula, as the state of the circulation which is found in scrofula does not exist in tuberculosis.

Before describing the chief pathological condition existing in scrofula, I would express my firm belief (for which I will in a future communication bring forward my evidence) that, after putting on one side tuberculosis and hereditary syphilis as totally distinct diseases, there is no evidence whatever of any specific taint in scrofula; that, on the contrary, there is every reason to believe that scrofula is merely slow inflammatory action of an unusually chronic character, produced by slight causes or arising spontaneously in persons predisposed to take on this action by constitutional debility, as evidenced principally by certain defects in the performance of the function of circulation.

The distinguishing pathological condition in a scrofulous person is a peculiar deficiency or weakness in the circulation. The blood appears, from some cause or other, to stagnate, especially in the exposed and superficial portions of the body, causing an appearance of venous congestion. This congestion, indicated on the cheeks and extremities by a purple or bluish tinge mingled with the natural colour, or by red of various shades disposed somewhat patchily, is one of the best signs of scrofula, and is, in fact, an unfailing indicator either of the disease itself or of a predisposition to its attacks. Occasionally a mottled appearance prevails over the whole body. The complexion thus caused varies from the over-florid hue of the apparently hearty child, in whom perhaps no consequences have arisen from his constitutional condition, or merely some ailment which does not affect his health, to the dusky tinge mingled with white of the exhausted sufferer. This colour in the cheek, which may sometimes be described as peach-coloured, is distinguished from that of health by the latter's difference of hue, more gradual shading off, greater uniformity of tinge, and clearness of surrounding skin. The scrofulous person is generally rather dusky, and even in cases where this duskiness is not shown in the face, and where the complexion may be bright if overloaded with colour, the constitutional condition may be revealed by the hands, the backs of which almost invariably exhibit the blue and mottled appearance I have described. A further distinction is that, if the scrofulous person has a bright colour, it appears to be on the surface, is abrupt, and obtrudes itself on one's notice, while the same amount of colour in a healthy person is more diffused and not so remarkable.

Another peculiarity in scrofulous individuals, due also to the condition of their circulation, is a swollen appearance of their extremities; they generally look as if they were suffering from extreme cold, and this appearance of the hands and feet remains, to a greater or less extent, even in very hot weather. Their legs and feet often have a doughy feel, and lack the firm resiliency of health.

Now this venous congestion exists not only in the skin and external surface of the body, but also in the mucous membranes, and is the predisposing cause, in a typical case of scrofula, not only of the disease itself, but even of the very appearance of the patient. The pulse is below the average of health, of fair volume, soft and regular, but wanting in force. The temperature is certainly not raised, and I am inclined to believe, from some observations I am making, that it is below that of health.

Scrofulous people are, as a rule, fleshy and heavy-looking, although not wanting in intellect; they are flabby and often deficient in muscular power. Their lips, alæ of nose, and eyelids are generally tumid from congested mucous membrane, and their abdomen is inclined to be prominent. Their extremities are large and swollen, and do not usually exhibit that symmetry which may be found in healthier persons. Their hair may be any colour; the red and the dark hair show the best specimens of scrofula, but the dark are the more numerous. They do not in any particular resemble people suffering from tubercular disease, nor have they any tendency to become tuberculous. They do not waste, nor do they suffer from that irritable form of dyspepsia known as strumous dyspepsia. Their circulation is not quickened, nor their temperature raised. They have not the quick, irritable pulse of tuberculosis; nor have they, even in advanced cases, any fever or night sweats. Their disease does not run a rapid course, but generally extends over many years, and very rarely proves fatal. They are good subjects for operation, exhibiting no irritability, the only drawback being that their wounds have a tendency to become sluggish. In these and numerous other symptoms they are diametrically opposite to persons suffering from tubercular disease; and I hope shortly to be able to lay these distinctions, drawn from observations in a large number of cases, more clearly and fully before the profession.

Margate, April, 1871.

FATAL CASE OF FRACTURE OF CERVICAL VERTEBRA.

BY DEP. INSPECTOR-GENERAL J. L. DONNET, M.D., R.N.,

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(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)

AN officer, on the morning of the 15th of February, had gone to Port Henderson for the purpose of bathing. (Port Henderson is situated on the opposite shore, two miles from Port Royal.) In the act of plunging head foremost, his head struck the sandy bottom with some force, and when assistance was afforded he was discovered to be powerless in his lower limbs. He was brought into Jamaica Hospital at 9.45 on the morning of the accident.

On examination, there was complete paralysis both of sensation and of motion of the body, commencing at a line which surrounded the thorax about two inches and a half below the nipples. The head was perfectly free; intellect clear; he had remembrance of everything that had occurred and of all the circumstances connected with his state. The upper extremities were under the control of his will, especially the shoulders and arms; but the forearm appeared to have lost some degree of power, for, as he raised the arm, the forearm, though raised with it, soon after flexed itself on the elbow, and the hand was remarked to have lost its power of grasping. The sensation of the upper extremities was intact. On running the hand along each vertebra of the spinal column, he made no complaint of pain until the hand came in contact with that portion which corresponded to the fourth, fifth, sixth, and seventh cervical vertebræ; the hand, however, could discover no displacement nor dislocation in this locality. The rotation of the head upon the spine was easy, but any attempt at flexion was accompanied by pain. The pulse was natural, the respiration normal, the expression of the face good; no sensation could be elicited by tickling the soles of the feet; there was marked priapism. He was placed in a water bed, the head adjusted in such a way as to control all movement; the urine was drawn off by catheter, and the bowels relieved by enemata.

On the evening of the 18th he complained more of his back; the pulse was somewhat higher; there was a feeling of cold, which he referred to a fiery sea-breeze which was then blowing, and which was felt through the whole building.

On the morning of the 19th the temperature had risen to 105°, and the beats of the pulse to 106; his mind wandered, and he ejected from his stomach a large quantity of matter resembling black vomit. (This matter, when placed under the microscope, was of a reddish-brown colour, and appeared to consist chiefly of numerous non-nucleated globules intermixed with some epithelium of the stomach.) The vomiting continued for some time, but was at first partly, then wholly, checked by means of effervescing draughts, champagne, ice, &c., and did not recur after 2 P.M. Albuminous urine coexisted with this vomit.

Though the patient had slept during the greater part of the night of the 19th, his rest had been troubled by dreams. There was great prostration; his intellect, however, had become again clear, and continued so to within a short time before death. The pulse was 100; temperature of body 104°; respiration laboured and sibilant; pupils contracted. The vital powers were fast diminishing; convulsive twitchings of the muscles of the face were observed, followed by gentle retraction of the forearms, and as gentle relaxation; and at 2.45 P.M. he expired. At the time of the convulsive twitchings of the muscles of the face and of the drawing up of the forearms the pulse beat 72 per minute with much regularity, and the respiratory movements were four per minute.

At the post-mortem examination, which took place sixteen hours after death, the fifth cervical vertebra was found fractured transversely, close to its articulating facets, so that the spinous process with its laminæ was quite detached from the body of this vertebra; the body itself was broken up into a number of small pieces. The spinal cord had suffered much compression opposite to the fifth cervical vertebra, and was, at this point, almost wholly converted into a mass of blood and soft spinal matter. A quantity of blood had been effused into the substance of the cord above and below this portion and had obliterated the grey matter. This effusion had extended upwards to the upper edge of the third cervical vertebra, and downwards to the lower edge of the first dorsal. The greater portion of this part of the spinal cord was disintegrated, and had become softened where it had come in contact with the effused blood. There was no effusion of blood between the cord and theca; the pia mater investing the spinal cord was here hyperæmic. The mucous coats of the stomach and intestines were highly congested, and in the cavity of the former there was a quantity, amounting to six ounces, of a black grumous matter. The liver was of a healthy appearance in colour and consistence, whilst the spleen was larger than natural, and, under pressure, broke down into a matter resembling red currant jelly, though darker. The urine in the bladder was highly albuminous, and contained a quantity of phosphates.

In the symptoms which marked the case two offered which were peculiar—viz., black vomit and albumen in the urine. I can only refer these symptoms to the great shock that the nervous system had sustained, which, acting upon the cerebro-spinal axis in a manner analogous to that of the poison of yellow fever, had produced similar results; for with the exception of these two symptoms none other offered. The liver was natural; and though the heat of surface was above the normal line of temperature, this was accounted for by the hyperæmic state of the coverings of the spinal cord, and by the congested state of the mucous coats of the stomach and intestines.

NOTES OF A CASE OF HEPATIC ABSCESS.

BY G. W. JAMESON,
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A MAHOMMEDAN FAKEER, aged forty, was admitted into hospital at Hurdui, Oudh, under my care, on the 23rd of August, 1865, complaining of pain in his right side. He said he had been ill for about four months with intermittent fever, and at time of admission was greatly emaciated. There was considerable enlargement of the liver, pain on pressure, rigidity of the muscles of the chest and abdomen on the right side, constipated bowels, and peculiarly dark, offensive stools. No history of dysentery. Ordered, quinine, nitro-hydrochloric acid, one-third of a grain of podophyllin, with ipecacuanha and henbane, every night, and the application of iodine externally.

Aug. 28th.—Says he feels a good deal easier; stools more natural; liver smaller if anything, and less painful on pressure.

Sept. 2nd.—The hepatic tumour has begun to bulge more than before, just below the edge of the ribs; indistinct fluctuation; suspiciously hectic-like symptoms have come on.

4th.—Fluctuation more distinct; hectic more marked. Decided to operate. A broad abdominal bandage having been first firmly applied (a small hole being left in it at the seat of puncture), the tumour was then tapped at its most prominent part, a little below the edge of the ribs, with a medium-sized ordinary trocar and canula, and *seventy-two* fluid ounces of purulent fluid of a pinkish tinge were drawn off. The canula being then found to be grasped in the wound in the liver, the abscess was gently syringed out with tepid water containing a small quantity of solution of permanganate of potass, and the instrument secured in the wound by means of strips of adhesive plaster, the patient being placed on his right side.

5th.—Feels much easier; pulse weak, but not fast. Abscess syringed out as before, twice daily; the canula remains firmly in the wound. To have stimulants and nourishing diet.

6th.—Easy, but weak; discharge from canula has been gradually decreasing; is quite free from smell. Abscess washed out as before.

7th.—Canula dropped out of wound; no discharge; no pain; very weak.

8th.—Morning: rather weaker, but comfortable. Stimulants freely given. Puncture healed up.—Evening: died of exhaustion.

An autopsy was made a few hours after death; and it was discovered that a single abscess occupied the whole substance of the liver, except a small portion of the posterior part of the right lobe. The liver presented the appearance of a bag, with walls in some places not more than a quarter of an inch thick. The cavity of the abscess contained a small quantity of pus, similar to that which had been removed during life. This cavity was found capable of containing eighteen fluid ounces of water. The walls of the abscess were studded with numerous granulations. There were adhesions to the stomach and diaphragm, and to the abdominal wall where the abscess had been punctured. The wound had been obliterated by recent plastic effusion; and the adhesions only extended to about half an inch round the course of the trocar. The gall-bladder was quite empty, but apparently healthy. The body was greatly

emaciated; but, except the liver, all the organs were perfectly healthy.

Remarks.—The most interesting features in this case are—first, the wonderful rapidity with which the cavity of the abscess contracted; it contained 72 fluid ounces of pus when first opened, and in four days could not be made to hold more than 18 ounces. And, secondly, that the irritation caused by the presence of the canula in the wound for some days, during which time it was kept in constant motion by each act of inspiration and expiration, did not produce some degree at least of peritonitis. The remarkable emptiness of the gall-bladder might, perhaps, be partly attributed to the therapeutic action ascribed to podophyllin; although, in consequence of the almost complete obliteration of the hepatic tissue, very little if any biliary fluid could have been very recently secreted.

Scarborough, Jan. 12th, 1871.

ON VENEREAL DISEASES.

Being an Abstract of Clinical Lectures delivered in University College Hospital,

BY BERKELEY HILL, M.B., F.R.C.S.,

ASSISTANT-SURGEON TO THE HOSPITAL, AND SURGEON FOR OUT-PATIENTS TO THE LOCK HOSPITAL.

No. I.

GONORRHŒA IN MEN.

INTRODUCING his subject by advising his audience never to encourage a tone of levity in speaking of these diseases, and, in order to learn speedily what is the matter, always to examine their patients methodically, the lecturer notified his intention to bring before the class examples of the three leading venereal disorders—namely, gonorrhœa, sores, and general syphilis as far as regards the eruptions on the skin and mucous membranes. Several patients were brought into the theatre to exemplify the ordinary varieties of acute urethritis in the male. The symptoms and anatomical characters of the disease were described, and the modes of treatment applicable to the various forms were detailed. Severe abortive methods, if used at all, must be resorted to only in the very earliest stage, before the discharge had come; but their adoption was strongly deprecated. If attacked in the first two days, a discharge can often be cut short by hourly or two-hourly injections of half- or quarter-grain of nitrate of silver, of half a grain of sulphate of zinc or tannin, to the ounce of water. To use this, the patient must keep quiet in bed or on a sofa, and combine with it the treatment more suited for an inflammation in full progress. For such early cases Mr. Durham's elastic bottle and vulcanite nozzle injector is very suitable. By this the lotion or stream of warm water is thrown from the syringe from behind forwards to the meatus, so that the whole diseased part can be flushed out freely. With this exception, the time for injection comes when inflammation subsides. During the stages of increasing irritation the patient should comply, as nearly as his avocations will permit, with the following conditions: Perfect rest; tepid baths, immersing the whole body for half an hour or an hour, twice daily. He should take, every four or six hours, a saline draught, such as the following: Two scruples of bicarbonate of soda, two scruples of white sugar, and two drops of essence of lemon, in six ounces of water. If constitutional disturbance come on, a saline containing one-fourth or one-fifth of a grain of tartrated antimony should be given until the skin grows moist and the pulse soft. Severe pain in the groin or perineum calls for six to eight leeches, repeated even the same day if the pain return. The parts must be kept well supported, very clean, and enveloped in warm wet rags. Scalding is best relieved by removing wine, beer, coffee, asparagus, and other irritants from the diet, by diluting the urine with frequent demulcent alkaline drinks, and by immersing the penis in a cup of ice-cold water while the bladder is evacuated. Heat sometimes answers better than cold; for this, apply very hot sponges on each side of the penis while the urine flows. Let both be suggested; but cold injections into the passage do more harm than good. When the organ is semi-erect and turgid with extreme congestion, a fifth of a grain of morphia injected under the skin at bedtime, or a suppository of one-third of a grain of morphia and two grains of belladonna extract relieve very much. These are also the most effectual remedies for chordee.

When the acuteness of the inflammation has passed, the time for checking the discharge has arrived. For this the so-called specifics have greater success the more carefully the right moment for their use is chosen. They may be given when the scalding is gone or nearly so, when the discharge is plentiful or greenish-yellow, and when the redness has greatly subsided. But they should never be employed, however long the discharge has continued, if the scalding is still severe, if the glans is still swollen, if the mucous membrane is of a dull violet-red, and if the discharge leaves on the linen large grey stains with a yellow centre. In these cases keep to the alkalies and warm baths. Specifics comprise copaiba, cubebs, oil of sandal-wood, tar, balsams of tolu or Peru, Canada balsam, turpentine, &c. The latter are seldom used, and are probably only of service so far as they resemble copaiba. Several modes of giving copaiba were described; the quantity to be taken in twenty-four hours, by small frequent doses, rather than by two or three large ones, being from one to three drachms. Samples of capsules, mixtures, and pastes of copaiba were shown; and a novel French preparation—a jelly—was handed round, which Mr. Hill finds patients take very readily. The specimen was prepared by Mr. Martindale, dispenser to the hospital, who has improved the formula for its preparation.* It is a bright jelly, almost as firm as calf's-foot jelly, very attractive by its rosy-red colour to the eye, and not repulsive to the palate, its flavour being masked by peppermint. As it contains 75 per cent. of copaiba, large quantities can be taken in a small bulk. If a piece as large as a filbert be rolled in wafer-paper, it can be swallowed without being tasted at all. The after-effects of nausea, diarrhœa, &c., are not more if so frequent as from other forms of copaiba. These evil effects, besides the rare chance of hæmaturia, demand caution in the use of copaiba, in patients trying it for the first time. Cubebs, better suited for old chronic discharge, should be given as the fresh powder; the oil, and even the etherial extract, are of doubtful value, for it is said that the virtue lies wholly in a resin that is with difficulty separable. Three to six drachms should be given in the twenty-four hours. To oil of sandal-wood, which had been extensively tried at the Lock Hospital, Mr. Hill could not attribute any advantage over copaiba, though now and then it could be borne when the other could not. Dr. Henderson has suggested the best formula—viz.: Oil of sandal-wood, one ounce; rectified spirits of wine, two ounces; oil of cinnamon, twenty-five minims: one or two drachms three times a day. Or the oil may be administered in capsules. Injections should be used in the same stages as copaiba. Various mineral and vegetable astringents were enumerated, and the following rules laid down as applicable to all injections:—The bladder should always be voided before injecting the urethra, both to sweep out the mucus and to allow a long interval for the astringent to lie in contact with the mucous membrane. Every injection which causes more than a few minutes' smarting or heat is too strong, or not of the right sort. Injections should be used at least thrice daily, and usually five or six times; and, beginning with weak solutions, they should be strengthened every two days until the discharge stops, and then discontinued by easy stages. When the discharge is abundant, the injection should be thickened with mucilage, and rendered less piquant by adding liquid extract of opium or extract of belladonna. Mr. Hill remarked that permanganate of potash as an injection had been put to rather extensive trial at the Lock Hospital with all kinds of discharges,

* This is Mr. Martindale's formula:—Take of thick copaiva eight ounces; powdered sugar, four ounces; honey (not crystallised), four ounces; distilled water, five drachms; oil of peppermint, one drachm; roseine, one-tenth of a grain (dissolved in twenty minims of water). Put the honey, sugar, copaiva, and water in an evaporating dish. Keeping it well stirred, heat the mixture gently till it boils, and continue the agitation and ebullition about five minutes. In the first part of the operation two distinct strata are formed: the upper, the copaiva; the lower, the honey &c. As the water is evaporated, numerous bubbles of steam are given off just as the whole becomes a homogeneous jelly. When it has partly cooled stir in the roseine and oil of peppermint. When well made it should resemble raspberry jelly. Should this very minute quantity of roseine (one of the aniline pigments) be objected to, an ammoniacal solution of carmine gives a very good colour.

but very few of the patients had derived benefit from it. Most were made worse, and some complained rather vehemently. It was suspicious that a considerable number of the patients so treated did not appear a second time. Either their disease was cured off-hand, or they were so little enamoured of the permanganate that they declined a second trial. A variety of urethral syringes were shown, those of unsuitable pattern being pointed out, and the mode of instructing patients in their use described. A new one, constructed by Mr. Hawkesley, of Blenheim-street, Bond-street, for patients to carry in the pocket, with a small supply of lotion, was shown. It resembles a funnel-shaped drop bottle, about three inches long, terminating in a nozzle below, and closed by an india-rubber diaphragm above. The syringe is easily filled and emptied by alternately depressing and elevating the thumb on the elastic cover, and about two drachms can thus be drawn from a bottle and thrown into the urethra in a few moments. The limited trial to which this syringe has been yet put makes it necessary to speak with caution, but it has proved very useful in several patients' hands. After describing the leading concomitants or consequences of urethritis, Mr. Hill concluded by warning his hearers not to suppose that every case of gonorrhœa, either in men or women, was set up by a specific contagion. Perhaps ninety out of every hundred are so; but the most efficient predisposing cause—one seldom absent in those affected—was any violent irritation of the urethra, such as prolonged sexual excitement, alcoholic excess, and particularly the use of so-called "preventive" injections immediately after coitus. This was stigmatised as a very dangerous procedure. With such predisposing causes urethritis might arise from contamination with almost any disordered vaginal discharge without any specific contagion.

A CASE OF PERINEAL PERFORATION DURING LABOUR.

By FRANK ARGLES, L.R.C.P., M.R.C.S.

ON March 23rd I was called at 8.30 A.M. to attend Mrs. G——, aged twenty-eight, in her first confinement. I found, upon examining her, that the head was pressing firmly upon the perineum, and the membranes were slightly protruding; the external parts were *very small*. The pains were good and regular, occurring about every two minutes; but they seemed in no way to dilate the external parts. In half an hour the membranes ruptured. I supported the perineum well throughout the case, and after being with my patient about an hour I found that the head had passed through the posterior wall of the vagina, and the face was presenting itself through an artificial opening in the perineum, just anterior to the anus, between it and the vagina, and without injuring the bowel. This false passage was, of course, with each pain getting larger. Feeling confident that the child must be born eventually through this opening, after consultation with Dr. Hawkes, I passed a director down the natural passage, between it and the child's head, and slit it up for an inch and a half. In less than a minute a living female child was born. I ordered the bowels to be kept quiet for the first five days after delivery, and then a gruel enema to be administered. Warm-water cloths were from the commencement applied to the injured parts. On April 12th the wound was entirely healed, and my patient was able to walk downstairs.

Wanstead, E., April, 1871.

UNIVERSITY OF LONDON.—At a meeting of the Senate of the University of London, on Wednesday, the 26th inst., the following gentlemen were elected examiners for the medical degrees during the ensuing year:—In Medicine: Dr. Bristowe and Dr. Russell Reynolds. In Surgery: Profs. John Birkett and John Marshall. In Anatomy: Profs. John Wood and G. V. Ellis. In Physiology: Prof. Michael Foster and Mr. Henry Power. In Obstetric Medicine: Dr. Barnes and Prof. Graily Hewitt. In Materia Medica: Dr. Fraser and Prof. Garrod. In Forensic Medicine: Dr. Headlam Greenhow and Dr. Thomas Stevenson.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

TWO CASES OF ABSCESS IN THE MASTOID PROCESS; PERFORATION OF THE BONE.

(Under the care of Mr. BARWELL.)

CASE 1. — E. F——, six years of age, was brought to the hospital with a history of severe pain in the head, which had the effect of sometimes driving her "half-mad," and at other times of producing stupefaction. She had the appearance of having borne a great deal of suffering, and looked ill; the left ear emitted a thick discharge; the corresponding mastoid process, of which the skin was shining and reddened, was slightly swollen and exceedingly tender; the left side of the pharynx was also somewhat reddened and swollen. On the evidence of these symptoms Mr. Barwell decided to pierce the bone from behind the ear. A T-shaped incision was made over the mastoid process, and the two flaps were reflected. On the surface of the bone being then gently probed with the point of the knife, a soft spot was discovered, at which an opening was drilled with a pointed gouge. Through this some thick dark-coloured pus escaped, and some fragments of necrosed bone were removed. Mr. Barwell then scraped the carious portions of the bone until healthy tissue was reached, and plugged the wound with a piece of lint dipped in carbolic-acid lotion.

Two days later the child was free from pain and had lost her suffering appearance. She was ordered ten grains of chlorate of potassium three times a day, and was shortly afterwards discharged with instructions to keep the wound open with a plug of lint and to attend frequently at the hospital. These injunctions she did not, however, obey, and twelve days after the operation, when she was induced by a return of the pain in the head to visit the hospital, the wound was found to have closed. It was reopened with a probe, and its patency was maintained by means of a nail-shaped plug of gentian-root until the thirty-sixth day after the first operation, when every indication for its continued use had disappeared.

In reference to this operation, Mr. Barwell said that abscess in the mastoid process was not an uncommon disease of childhood. It first found vent into the tympanum through the natural opening, but, on account of the insufficiency of this passage, it also made itself a way into the meatus externus. Sometimes the bone would become more and more affected until at length the cerebral surface became involved, and then inflammation and abscess of the brain was liable to follow. Another danger, which the proximity of the lateral sinus would explain, was the supervention of pyæmia. The position of that canal also necessitated the exercise of great caution and gentleness on the part of the operator, lest he should plunge his instrument through the inner table of the skull, more especially as in children the tissues of the mastoid process are soft, and of less comparative depth on account of the non-development of the mastoid cells.

CASE 2.—The second case is of greater interest, on account of the patient having reached the comparatively mature age of forty-seven, and as the premonitory symptoms were accompanied by profuse epistaxis, for which the patient, Martha B——, was admitted some weeks before the nature of the disease could be clearly made out.

On the occasion of her first admission, the posterior nares were plugged by the house-surgeon, Mr. Towt, and large doses of the sesquichloride of iron were administered. The patient was a stout, well-made woman, with a rather puffy face; but no evidence either of kidney or heart disease

could be detected. She stated that for some weeks previously she had suffered from occasional epistaxis and "flying pains" in the head and neck, and that during the night a clear limpid fluid exuded from her left ear. A careful examination of the fauces, nares, and occipital regions threw no light on the cause of her symptoms. The hæmorrhage returned twice during her stay in the hospital, and on the forty-third day she was discharged in an improved condition. About six weeks later she was readmitted with intense pain in the left side of the head and difficulty in swallowing. The skin over the mastoid process was found to be tumid, red, and very tender. The left side of the pharynx was similarly affected. It was decided to operate in this case as in the preceding one, except that an instrument of rather larger size was employed. A large quantity of pus and several small pieces of necrosed bone were liberated. The patient made a rapid and uninterrupted recovery, and left the hospital twenty-four days after the performance of the operation.

GUY'S HOSPITAL.

ON the 21st inst. the following operations were performed at this hospital.

(By Mr. BRYANT.)

Excision of the Testicle.—The patient was a middle-aged man, the subject of long-standing disease of the testis. The gland protruded through a ragged opening in the scrotum. There were scars over the left, and evidences of active disease of the right, tibia. The house-surgeon had found it impossible to elicit any history of syphilitic contagion; but a section of the excised gland showed a quantity of adventitious plastic material of a syphilitic character.

Removal of an Ungual Exostosis.—This growth was not much larger than a pea, but it projected in front of, and considerably upraised, the great toe-nail. The tissues at its pedicle having been divided with the knife, it was removed with bone forceps.

(By Mr. COOMBER, Dresser.)

Amputation of the Finger for Enchondroma.—This operation was performed by the dresser of the case, in Mr. Bryant's presence. The tumour was situated on the first phalanx of the middle finger. Lateral flaps were so taken from the root of the finger as to leave the palm of the hand intact; and the finger having been excised, the head of the corresponding metacarpal bone was removed with cutting forceps. When the flaps were brought together there remained only a small wound on the dorsal aspect of the hand.

Attempt to close an Artificial Anus in the Right Loin, and to restore the Use of the Large Intestine.—In the wards Mr. Bryant pointed out a middle-aged woman on whom colotomy was performed in the right loin some five years ago for stricture of the rectum which had obstinately resisted palliative treatment. On the patient coming recently under Mr. Bryant's care it was discovered that liquids injected into the rectum found their way readily to the artificial opening, and, after satisfying himself as to the ample patency of the gut, he dissected from the opening in the loin the attached portion, and having closed its aperture with a continuous suture, as for an ordinary wound of the intestine, he dropped it into the belly. The patient now passes fæcal matter daily by the anus, though small portions still find their way through the iliac opening. At first the contact of injections with the mucous surface of the long-unused intestine caused griping pains of great severity. We hope to observe the further progress of this case.

UNIVERSITY COLLEGE HOSPITAL.

OPERATION FOR THE CURE OF PROLAPSUS UTERI.

(By Dr. GRAILY HEWITT.)

DR. GRAILY HEWITT'S operation for the cure of prolapsus uteri consists in removing from the perineal end of the posterior wall of the vagina a triangular portion of mucous membrane, of which the apex is towards the uterus, and the base at the posterior commissure of the vulva. In the present instance, an operation performed two months previously had succeeded so far as regarded the vaginal mucous membrane, but, union having failed to take place between the edges of the base of the triangular wound, the constriction of the vaginal orifice, which was the main object in view, had not been effected. Dr. Hewitt pared the edges of the posterior half of the orifice, and brought them together by means of two deep interrupted sutures of strong metal wire, and three superficial sutures of finer wire inserted within the deep ones. The deep sutures were secured by means of a small apparatus which Dr. Hewitt calls a "bead." It is made of ebonite, is gourd-shaped, and consists of a body and an expanding neck, of which the former is as large as a full-sized pea. When the suture is inserted a bead is strung on at either end, with the neck outwards; and while it is pressed against the labium with one hand with the proper amount of force, it is fixed in position by winding round its neck, with the other, the projecting extremity of the wire suture. Dr. Graily Hewitt claims for the beads that, their action being more defined and local than that of portions of bougie, they have not the same tendency to maintain, in the included lips of the wound, a state of congestion which is unfavourable to healing, and has in some instances produced sloughing.

PROVINCIAL HOSPITAL REPORTS.

HUNTINGDON COUNTY HOSPITAL.

A CASE OF TETANUS TREATED WITH NITRITE OF AMYL AND CHLORAL HYDRATE.

(Under the care of Mr. FOSTER.)

IN Mr. Foster's practice at the Huntingdon Hospital there has already occurred one case of successful treatment of tetanus with nitrite of amyl. In the following case, for the notes of which we are indebted to Mr. J. Bower Wilson, the house-surgeon, large doses of chloral also were administered.

John C——, a shepherd, aged forty, was admitted on Jan. 15th, 1871. Three weeks previously he had received a lacerated wound on the back of his right hand. Five days before admission he thought he had caught cold, and felt stiff, more especially about the lower jaw and the neck. On the following day he could not masticate. On admission there were well-marked symptoms of tetanus in the jaws and muscles of deglutition; the characteristic spasm became aggravated every five minutes, and also at every attempt to move or to swallow. The nitrite of amyl was administered in five-drop doses, which were inhaled on the onset of the spasms as they successively occurred. Two scruples of hydrate of chloral were given shortly after admission in three tablespoonfuls of water. Half that dose was ordered to be repeated every six hours. Beef-tea, milk, and eggs were to be given *ad libitum*, and three ounces of brandy daily. On the first night he slept from 11 P.M. to 3 A.M. The treatment just indicated was continued with slight variation from day to day, and the patient gradually improved. The nitrite of amyl and the chloral were discontinued fourteen days after admission. The greatest amount of chloral was taken during the first twenty-four hours, when a hundred grains were administered; of the nitrite of amyl three drachms were inhaled in fourteen days. On the twenty-second day the patient left his bed, and on the forty-eighth day he was discharged well.

DIEULAFOY'S ASPIRATION SYRINGE.—This ingenious instrument has been proposed and used by Dr. Dieulafoy for removing, subcutaneously, various pathological secretions and effusions. As usual, priority has first been disputed in France, where the instrument has been invented; then we find Dr. Bresgen (*Allg. Med. Cent. Zeit.*, April 19th) pointing out that, in September, 1869, he published a pamphlet in which the identical syringe is depicted, the latter having been used in the case of the Crown Prince of Belgium. Dr. Bresgen maintains that Dieulafoy, by some modifications, spoiled the instrument. Nor should it pass unnoticed that the aspirator made by Mayer and Meltzer, of Great Portland-street, under the name of Dr. Protheroe Smith's apparatus, is essentially analogous to the syringe under consideration.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 11TH, 1871.

MR. CURLING, F.R.S., PRESIDENT, IN THE CHAIR.

ON A CASE OF RETROGRESSIVE LABIO-GLOSSO-LARYNGEAL PARALYSIS.

BY ALEXANDER SILVER, M.D.,
SENIOR ASSISTANT-PHYSICIAN TO CHARING-CROSS HOSPITAL.

(*Communicated by* DR. HYDE SALTER.)

THE patient, W. G——, was a man aged fifty-three, by trade a carriage smith, twice married, and temperate. He had been generally healthy, but in his history there were certain facts pointing to syphilitic infection. He had previously been an in-patient at the Middlesex Hospital for incomplete right hemiplegia and left facial palsy, with difficulty and indistinctness of speech. He was gradually recovering, when he was again seized and brought to Charing-cross Hospital, where he was seen by Dr. Silver. On the morning of Jan. 5th he was able to swallow his breakfast and to speak indistinctly. By noon on the same day he could neither speak nor swallow; the right corner of his mouth was drawn downwards, and an abundant tenacious saliva flowed from it.

When admitted, his right eyelid drooped, and his mouth was dragged over to the right side; his lips were thick and blubber-like; and from the depressed corner of his mouth flowed an abundance of thick viscid saliva. He could not close his mouth, even imperfectly; he could not protrude his tongue beyond his teeth. There was some degree of paralysis of the soft palate, for his respiration was snorting; but food or drink did not regurgitate through his nose. His intelligence was perfect, but when asked to speak only the rush of air through the open powerless larynx could be heard. He had complete command over his limbs; he could lift both legs off the bed, and smartly withdrew either when its sole was tickled. His senses were perfect, but dull. His bowels were obstinately confined. His breathing was very imperfect and shallow; respirations 36 a minute; pulse 120, and very feeble. His appetite was unimpaired and his power of taste uninjured; for a time he was fed solely by the stomach-pump. Notwithstanding the quick pulse and rapid respiration, his temperature for long remained at 97° in the axilla. The breathing was mostly abdominal, but there was slight action of the intercostal muscles. Expiratory power was most deficient.

From the period of his admission up to the present time the patient has continued to improve in every respect. As to treatment, iodide of potassium was given in scruple doses three times a day. Occasional blisters were also applied to the back of his neck; and latterly localised electrisation was employed to exercise the paralysed muscles, which responded to the stimulus with unusual facility.

The case was called *retrogressive* to contra-distinguish it from the *progressive* form of the malady, to which alone Duchenne would limit the name of *true* labio-glosso-laryngeal paralysis. This form tends to get well, whilst that referred to by Duchenne ends invariably in death.* The name is the more appropriate as this case in many respects closely resembles one of the progressive variety read backwards. The state of this patient seemed, when first seen, identical with that of one suffering from the progressive form of the disease just before its fatal termination. At any moment the patient might be carried off, as if the case were progressive; but the tide once fairly turned, there was a chance of recovery, however gradual.

These different morbid conditions evidently depended on lesions of certain nerve trunks or roots. Thus the paralysis of the lips would imply paralysis of a portion of the facial on both sides, but this nerve was apparently more affected on the left side than on the right, since the mouth was drawn to the latter. Again, the paralysis of the muscles of mastication implied loss of power in the motor branch of the trigeminus. The paralysis of the tongue—that is to say, his inability to protrude it beyond his lips—would imply paralysis of the hypoglossal. The inability to swallow, and the respiratory and cardiac complications, pointed to the implication of the vagus; whilst the loss of voice was due to paralysis of the cerebral portion of the spinal accessory. It so happens that one section of the medulla oblongata made and figured by Dr. Lockhart Clarke illustrates this to a nicety. In it are displayed the hypoglossal and spinal accessory springing from their nuclei, and lying between those and the central canal, the cut band of fibres constituting the long root of the facial. Injury to the medullary substance at this level would inevitably occasion more or less loss of voice, both as regards articulation and phonation, with paralysis of the orbicularis oris. Higher up, where the hypoglossal nucleus has almost disappeared, there is to be seen another descending band, closely connected with the descending band of the facial, at this level greatly increased in bulk. This new band constitutes the descending, or motor, root of the trigeminus, which, speaking broadly, presides over the muscles of mastication, and which (for it has been traced downwards to the level of the lower portion of the olivary body) is thus brought into exact accord with the facial and hypoglossal. At first the most dangerous symptoms were cardiac and respiratory, and this imperfect action of the heart and lungs is exactly what follows section of the pneumogastrics in one of the lower animals. Their inhibitory action on the heart is thus removed. Here, therefore, the nerve affected would seem to have been the vagus, and that, too, at its nucleus rather than in its course.

Finally, as to the saliva, a partial paralysis of the chorda tympani, and a withdrawal of its influence from the submaxillary gland, might, by overturning the normal balance between it and the sympathetic, produce a flow of thick and tenacious, instead of normal, saliva, and so relegate the phenomenon to the same site as the others—that is to say, a minute space on the floor of the fourth ventricle and upper portion of the medulla oblongata.

Dr. DRYSDALE said that in syphilitic patients there was often hemiplegia and loss of speech. Such a case had been under his care not long ago. He thought there could be no doubt of the syphilitic nature of the present case. He thought the lesion would be the result of a soft deposit, not of a bony node.

Mr. BARWELL had seen several of these cases with Duchenne. In some, one side was affected more than the other. He asked how certain muscles of mastication remained unaffected, whilst others were so early in the case.

Dr. BROADBENT concurred with previous speakers in their high estimation of the value of the communication. He agreed with Dr. Silver that the group of symptoms met with in labio-glosso-laryngeal paralysis was indicative simply of lesion in a certain part of the medulla oblongata; and this, though usually degenerative in character, might be due to other morbid changes. Duchenne and Trousseau in prefixing the term "progressive," and in insisting on a certain definite course as a feature of the disease, had, as in the case of locomotor ataxy, diverted attention in some degree from the endeavour to fix upon the exact seat and nature of the lesion, which was the really important question in affections of the nervous system, by setting up a specific type to which cases were to be referred. In a case which had been under Dr. Broadbent's care, there were all the symptoms described by these observers; but the access of the paralysis was sudden, and there was little subsequent change—facts which pointed to hæmorrhage as the probable cause. He also differed from Duchenne in the interpretation of some of the symptoms. The respiratory movements are impaired in these cases, and, according to Duchenne, expiration is especially enfeebled. Expiration is, however, mainly due to the elasticity of the lungs, partly, also, to the elasticity of the thoracic parietes, very little to any muscular action; and in labio-glosso-laryngeal paralysis, the feebleness of expiration is proportionate to, and consequent upon, the feebleness of the antecedent inspiration. Coughing and sneezing, which are instanced as expiratory actions gravely impaired, are rendered impossible by the impossibility of closing the larynx and fauces, an act which is necessary for the production of the explosion of the cough or sneeze. While accepting generally Dr. Silver's admirable demonstration of the seat of the lesion, Dr. Broadbent considered it probable that it involved an elongated longitudinal tract along the middle

* For a sample case of the latter, see the "Archives de Physiologie, Normale et Pathologique" for July and August, 1870.

line at the back of the medulla, rather than a limited transverse segment. The nuclei of the motor nerves affected—the spinal accessory, hypoglossal, facial, motor division of fifth (the last more deeply situated)—succeed each other from below upwards, around the spinal canal, and alongside the middle line of the floor of the fourth ventricle; and he did not see how they could all be implicated at any one point, especially without affection of some sensory nucleus laterally situated at the same level in the medulla. It was more difficult to decide what was the nature of the morbid change; it could not be degeneration, since the patient was recovering. The probable alternatives were, as Dr. Silver had said, hæmorrhage and syphilis, and each presented difficulties. Possibly there might be a small blood-clot in the upper end of the spinal canal and in the groove along the middle line of the floor of the fourth ventricle.

Dr. J. HARLEY remarked on the distribution of the disease. In the earlier history of the case the motor centres were affected, and apparently were so when the present malady came on. It would be worth while, therefore, to take into consideration the possibility of general softening.

Dr. SILVER, in reply, thanked the Society for the reception his paper had met with, and especially referred to Dr. Broadbent's able criticism. He hardly thought, however, the explanation given by Dr. Broadbent, as to site, was correct, as parts not immediately on the surface of the ventricle were affected. With regard to Dr. Harley's criticism, he pointed out that the perfect intelligence and perfect sensation of the patient militated against the notion of general softening.

ON AMPUTATION OF THE CANCEROUS BREAST.

BY ROBERT LEE, M.D., F.R.S.

The object of this communication was twofold—first, to describe a case in which a woman, from whom both mammæ had been removed, was delivered of a child; and, secondly, to point out the different opinions of eminent surgeons and physicians as to the desirableness of amputating the breast in cancer, the danger of the operation, and the frequency with which it is needlessly performed.

Mr. SPENCER WELLS asked if the tumour weighing a pound and a half was cancerous.

Dr. LEE said the tumours removed were not cancerous. True cancer always returned, and these had not. Breasts used to be freely removed in Edinburgh; most of the patients recovered from the operation, but many again returned, and some died in the country. Amputation was no cure for the disease.

Mr. GEORGE COOPER was anxious to hear an expression of opinion as to the performance of the operation. His experience was that cancer returned outwardly or inwardly. In one patient on whom he had operated two years ago, the disease had not yet returned.

Dr. JOHN HARLEY did not remember a single case of recovery, and he did not even think that the operation prolonged life.

Mr. BARWELL was of opinion that no single individual could say decidedly whether or not the operation was beneficial. Statistics alone could prove that, and they showed the operation prolonged life. After five years without return, the patient was safe. He knew two cases of ten and seven years' standing respectively.

Mr. HULKE felt bound to say that he never hesitated about the operation when it could be done fairly. It was not a final cure, still it prolonged life, and greatly lessened suffering, both mentally and bodily.

Mr. BIRKETT said people ought to have full histories before publishing cases. Dr. Lee's first case was not of the slightest value, nor had it any bearing on the discussion. Patients often came saying they had cancer when they had nothing of the kind. When the whole gland was not removed, pregnancy would naturally cause the portion retained to enlarge. Statistics showed that, when treated with escharotics, in all patients over forty, the disease returned. By judicious operation they might do all Mr. Hulke said. He knew of some living ten years, many from five to ten years, after operation, even when the breast had been ulcerating previously. Of all operations in surgery, amputation of the breast was the most successful. There was not a greater mortality than 5 per cent. at Guy's. He himself had only lost one patient.

Mr. J. B. HILL agreed with what had been said. He knew a patient who had been operated on fourteen years before.

Dr. LEE said Mr. Paget's statistics showed a mortality of 10 per cent. He himself had seen people die from the effects of the operation.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 5TH, 1871.

DR. BRAXTON HICKS, F.R.S., PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows of the Society:—Eli J. Barrick, M.D. (Toronto); Thomas S. Bulmer, M.D. (Woolwich); Alan Reeve Manby, M.R.C.S. (East Rudham); Chittathore B. Modelly, (Madras); and Lawson Tait, F.R.C.S. (Birmingham.)

Dr. GRAILY HEWITT exhibited a child whose forearm had probably undergone amputation in utero.

Dr. WILTSHIRE said it would be interesting to know what became of the parts amputated. Sir James Simpson and others had figured cases in which nearly complete absorption had taken place.

Dr. BARNES observed that it was not often strangulation by the umbilical cord, but by a string of false membrane that caused amputation. He had a drawing of a case in which amputation was in progress. In the case exhibited there was, as in most instances, a budding of a new limb from the stump, analogous to what was observed in some of the lower animals which had lost a limb. He regarded this budding, with the sign of cicatrix, as proof of amputation in the early stage of development.

Mr. SCOTT thought that if such cases occurred they were the exception. He knew a family in which the grandfather and the grandson had both forearms wanting. As the deficiency existed in both arms symmetrically it would be impossible to conceive that it could have occurred from any accidental constriction in utero.

Dr. BRUNTON showed a wax model of a successful vaccination performed with the lymph from a secondary vaccination.

Mr. EASTES considered the most obvious criticism upon the case to be that, although occasionally lymph from a secondary vaccination might produce a good vesicle, still it could in general be by no means depepded upon for that purpose.

Mr. WILKINSON stated that he had on several occasions vaccinated with the lymph from a revaccination.

Dr. WYNN WILLIAMS hoped none of the Fellows would be tempted by the apparent success to follow the practice. It would be interesting to know whether vaccination performed from a secondary vaccination was any protection against small-pox.

The PRESIDENT thought that if anyone was exposed to the contagion suddenly, and only secondary lymph could be obtained, it should be used; but he held that the person should, as soon as convenient, be revaccinated with primary lymph.

Mr. SCOTT had, from necessity, vaccinated a gentleman with secondary lymph, producing perfect vesicles. As he was much exposed to contagion, Mr. Scott revaccinated him in three weeks with primary lymph, and again vesication took place, but less perfectly.

Dr. WYNN WILLIAMS exhibited a Mole or Blighted Ovum passed by a lady supposed to have been three months pregnant. It had the appearance of a fleshy ball, and when cut into was hollow, with veins or sinuses in its interior filled with blood, not unlike so many distended leeches.

Dr. PHILLIPS thought such an appearance was not uncommon in an apoplectic ovum, in which the blood was effused between the decidua and the chorion, the latter and the amnion being raised by it, and forming distinct masses on the fœtal surface.

Dr. WESTMACOTT related the history of a case of miscarriage with triplets at the third month, and exhibited the embryos.

Dr. BARNES exhibited two instruments which he had found of great service. The first was a modification of

Lallemand's porte caustique, designed to carry into the uterus a stick of sulphate of zinc. The second was a speculum, for the purpose of facilitating the introduction of pledgets of cotton wool carrying any indicated medicament into the vagina.

Dr. WYNN WILLIAMS showed a patient nearly the whole of whose lower lip had been removed for epithelioma eighteen months previously. The disease shortly appearing in the cicatrix, the growth was successfully treated by two injections of bromine, twenty drops to a drachm of spirit. There was no appearance of disease at present. The patient was exhibited to exemplify the effects produced in similar diseases when situated in the neck of the womb.

Dr. PROTHEROE SMITH exhibited an Ovarian Tumour which he had removed on the preceding Saturday. The cyst was practically unilocular, but on its right side were three hard nodules, the microscopical examination of which led to the belief that they were of a malignant nature. The patient was doing well.

A resolution was then proposed by Dr. BARNES, seconded by Dr. MURRAY, and carried unanimously, expressing the regret felt by the Society at the loss of Professor Pietro Lazzati, a Foreign Honorary Fellow, and its sympathy with the late professor's relatives and friends in the great loss which they had sustained.

Dr. EDIS read the history and post-mortem appearances of a case of Abscess of the Ovary, and Tubercular Disease of the Fallopian tubes.

Dr. MEADOWS communicated for Mr. CRADOCK, of Shepton Mallet, the particulars of a case of Occluded Vagina after Delivery, with subsequent retention of menses, cured by operation.

Dr. GRAILY HEWITT then read a paper entitled "The Sickness of Pregnancy; its Cause and Treatment." The author said that the sickness observed in pregnancy has generally been accepted as an inevitable circumstance. The causes of its occasional inveteracy and even danger have never been satisfactorily made out. The treatment of these latter cases has not been conducted on any one principle. Yet it must be evident that an analogous cause must be in operation in the slight cases and in the more severe forms. The present state of professional opinion may be represented in the statement that it is due to the distending effect of the increasing contents of the uterus, exciting thereby in a reflex manner the act of vomiting. The author, accepting this view, proceeds to propound the theory that the existence of flexions of the uterus in various degrees of intensity is the prime factor in giving rise to the vomiting of pregnancy in by far the majority of instances, inasmuch as it offers an additional hindrance to the proper expansion of the uterus, and gives rise mechanically to such pressure on the sensitive uterine tissue at the seat of flexion as results, in most cases, in this particular reflex irritation. This theory as to the cause of the vomiting of pregnancy will account for the mild and severe forms of the symptoms. The author was led to this conclusion by observation of the close connexion between obstinate nausea and vomiting and flexion associated with distension of the uterus in the *non*-gravid state, as in cases of dysmenorrhœa produced by flexion. Latterly he had found himself applying this explanation to the gravid cases, and having tested the matter by observation for some little time past, the clinical facts which he had accumulated appeared very completely to bear out the general truth of the theory now enunciated. An anteflexed gravid uterus is most commonly the condition found to be present, the anteflexion existing before the pregnancy supervenes; retroflexion of the gravid uterus much less commonly, because the retroflexed uterus is less liable to become impregnated than the anteflexed organ. The very obstinate cases of sickness are observed generally at the second to the fourth month, when the uterus is sometimes found tightly fixed in the pelvis and unable to escape from it; how far the explanation will apply to cases where the uterus is more advanced in pregnancy the author does not say, not having had cases to test the matter by. The slight cases, when the sickness is limited to the time of rising from bed, are explained by the action of gravity in this erect posture suddenly bending the uterus on itself to a slight extent. Undoubtedly whatever tends to hinder the expansion of the uterus may equally induce sickness; thus some cases may not be accounted for by the theory now put forward. The results of treatment, based on the foregoing conclusions, and consisting in measures to restore the organ to its proper shape, have been found very successful in the author's experience; sometimes maintenance of the horizontal position alone sufficing, in other cases mechanical supports elevating the fundus anteriorly or posteriorly, according to circumstances, being used for the purpose. The author is quite satisfied of the value of the theory as a basis for practice. He believes that the pressure on the nerves of the uterus at the seat of the bend is the exciting agent; this pressure usually leads to congestion of the uterus above and below, and possibly other secondary results.

Dr. BARNES observed that there had been many theories advanced as to the cause of vomiting in pregnancy. Displacement of the uterus was an old theory. He was, however, in a position to state, from many precise observations, that flexions of the gravid uterus were often present without any unusual degree of vomiting, and that most obstinate vomiting occurred where there was no flexion. The theory of the stretching of the uterine fibre had been most distinctly set forth by the celebrated Bretonneau, of Tours. Many facts concurred in proving its truth. Growth that kept pace with the growth of the contents of the uterus did not cause vomiting, but it was caused whenever the fibre was stretched rapidly, the distending contents outrunning the accommodating growth of the uterus. When vomiting had once become excessive another element entered into the case. The defective nutrition was attended by impoverishment of the blood, and the blood was further degraded by the absorption of noxious material from the system; concurrently with this the habit of vomiting had induced a morbidly irritable state of the spinal cord, so that it readily responded to the slightest peripheral or emotional excitation.

Dr. TILT denied that vomiting was any more caused by flexions of the gravid than by displacement of the unimpregnated uterus. Uncomplicated uterine malpositions had no symptoms. In the case referred to in the paper the cure was attributed to rest in the horizontal posture, a remedy of general use, recommending itself on other grounds than the problematic power to rectify a flexed gravid womb. Dr. Tilt thought that the proposed practice of restraining the sickness of pregnancy by the use of pessaries likely to lead to disastrous results.

Dr. WYNN WILLIAMS thought the sickness might be aggravated by the unequal distension which would naturally result from flexions of the uterus. In the latter months of pregnancy the sickness was due to an entirely different cause, generally to pressure on the abdominal viscera, more especially the liver.

Dr. PLAYFAIR confessed to have heard Dr. Hewitt's proposal to apply mechanical supports to the gravid uterus with some alarm. Some points in the natural history of the sickness of pregnancy militated strongly against Dr. Hewitt's theory. Dr. Playfair did not doubt that some degree of sickness was a perfectly healthy phenomenon in pregnancy. Sickness was much more severe as a rule in first pregnancies; flexions, on the other hand, were most common in multiparæ. Again, it was by no means rare for sickness to continue beyond the fourth month, and then flexions could but very rarely exist.

Dr. WILTSHIRE said he had been requested by Dr. Buyko, who sat by him, to say that the hypothesis brought forward by Dr. Hewitt had also been propounded by Professor Krassovsky, of St. Petersburg. Dr. Wiltshire thought that flexions of the uterus were neither the only, nor the most common, cause of the sickness of pregnancy.

Dr. SNOW BECK said that anteversion and retroversion were not uncommon, and were one of the chief causes of sterility. When, however, impregnation occurred, sickness was not more frequent than in other cases where no deviation had been present. Much stress had been laid on the anteversion of the pregnant uterus, but he was unable to see anything to prevent the uterus rising in the abdomen in the usual way. As regards the imaginary stretching and thinning of the uterine tissue at the seat of version, the constriction of the bloodvessels and consequent congestion, and the assumed pressure on the nerves, he gave all these a direct denial. Further, the nerves at the seat of flexion were not those concerned in the production of sickness, for

it was a matter of every-day experience that affections of the fundus of the uterus were those so generally attended with sickness.

The PRESIDENT observed that his experience did not coincide with Dr. Hewitt's. He believed that tension of the uterus was the chief cause, as shown by the immediate relief afforded when the membranes were ruptured in some cases; but he certainly thought, with the author of the paper, that the retro- and anteflexed condition favoured the pressure. The act of vomiting probably tended to increase the displacement.

Mr. SCOTT said that in the most severe case which he remembered, the sickness continued to between the sixth and seventh month, and in which, therefore, there could be no question of any flexion being a cause. He had frequently seen cases of retroflexion with pregnancy without sickness. Mr. Scott thought acute anteflexion of the uterus was an absolute cause of sterility, whereas pregnancy occurred not unfrequently in severe cases of retroflexion.

In reply, Dr. GRAILY HEWITT thanked the Society for the criticisms on his paper. It must be evident, on necessary mechanical principles, that an organ like the uterus could not be acutely bent at the cervix without compression of its tissues on the concave side of the bend. He was not aware that the theory had been advanced in this shape by any previous author. With Dr. Barnes, he believed, and had stated as much, that the distension of the uterus was the cause, but whether it operated by compression of the nerves or by stretching of the muscular fibres was a question. He himself believed the former the true explanation. He could say, in reply to Dr. Tilt, that he had actually carried his own recommendations into practice to their full extent. He, however, recommended caution in the use of pessaries. The best adapted pessary for the anteflexed cases was the globular air pessary. The fact that sickness was most common in primiparæ was quite in conformity with the theory advanced. It must, however, be recollected that he did not contend that every case of sickness would be found to be a case of flexion, nor would every case of flexion be attended with sickness.

Reviews and Notices of Books.

Parisiana; the Real Truth about the Bombardment; or, the Volunteer with the Besieged Armies, 1870–71. By CAMERON STUART MACDOWALL, M.R.C.S.L., Indian Army, Author of "Via Dolorosa, or the Half-Sin of Lady Margaret." London: Provost and Co., Henrietta-street, Covent-Garden. 1871.

FROM the egg to the apple we have feasted on this remarkable work; from the illustration in the frontispiece to the advertisement of the "Via Dolorosa" we have perused its every varied sentiment. We presume that, as the drawing only gives the upper half of the unfortunate young lady who was "cut in two by a shell in the centre of Paris," our author will proceed to — shall we say extremities? when a second edition is called for, and that, technically speaking, he might have added to the portrait before us—"To be continued in our next." The table of contents has some droll headings; for example: "MacMahon.—My endeavour to cheer the people by the Prophecy Dodge." There are so many things to admire and wonder at in "Parisiana" that we almost fear to enhance in our readers' eyes one merit at the expense of others. The writing cannot be intended for burlesque or banter; for we are informed that this book contains "the real truth"—as opposed, we presume, to "the unreal truth" or to "the real untruth," —and naturally expect a Puritan simplicity of style and a mathematical regularity of matter.

Among the general points that may be noticed is the author's taste for italics. As regards his habit of italicising we are at once reminded of letters we used to receive from elderly female relatives, who scored their correspondence in he proportion of nine words out of ten, and of certain Transatlantic orators who emphasize all their little words, thinking, probably, that the larger ones could take care of themselves, but that the little ones required backing. Both our military and our non-military readers will be struck with the simplicity of the detail in the following passage. Speaking of the events at Sedan, he says:—

"Already, six times during the preceding days, attempts had been made to cut through those two hundred and fifty thousand Prussians (who were thus five to one nearly), to burst through that wall of rifled cannon ranged as close as infantry—and with what result? Mountains of dead so thick that the corpses *could not fall*, that men died standing, propped up by corpses, or by men in the death-throes that had *not room to sink down to earth*."

We might follow this with a figure or two from p. 20 that would probably astonish the ignorant Prussians. Next we may introduce a passage which smacks strongly of "ould Ireland" in its raciest times:—"But I hope that the 37th Battalion will be one of the first to make a serious sortie on the enemy, as it is formed of the inhabitants of the environs, and knows *personally* the whole line of country between Malmaison, Valérien Fort, and St. Denis."

The gallant doctor probably had an indistinct thought of the Author of Evil in speaking of the cantinière of the 5th Company:—"She is a handsome and good woman, though rather dark"—a singular modification!

Now let us take the author's views on capital punishment:—

"Society has a right, perhaps, to inflict the *same* penalty —*death*—on those who have *caused* death; but not *more!* Now a criminal condemned suffers sometimes, even for forty days, a *thousand* deaths, and more than deaths, until he is executed. The murdered man, his victim, has seldom, if ever, been kept in any torturing expectation or *suspense*. Society has therefore only a right to kill a man (if it have really such a right) *immediately* the judge passes sentence, then and there! A blow on the head with a mechanical hammer suspended over the dock would alone be strictly *just*, and at the same time most humane! Deathbed repentances are nonsense; so there is no use delaying execution."

At p. 14 he relates how he heard an orator, speaking of Napoleon III., say: "Yes, citizens, he followed the policy of that clever, but dangerous *Scotchman, Machiavelli*."

At p. 39, the author quotes an amusing incident at a meeting of Materialists and Atheists. "The first orator that rose to spout his nonsensical rhapsodies began by shouting out, 'Gentlemen, *thank God* I am an atheist!'"

The next passage we quote contains an awful warning to French commanders-in-chief against taking British wives; at least that would appear to be the inference:—"Macmahon has now a wound ten inches long on his thigh—few commanders-in-chief are *ever* wounded. His wife is a British woman, I believe. He is said to be very absent-minded, *except* on parade or in battle." And in a footnote on the same page he remarks:—"The correspondents of newspapers (*not* such as our William Russell, of Crimean and Indian renown), who speak so ignorantly about the 'bluster' of the National Guards, do so simply because they never went to a sortie, except with the rear-guard, in a cab, or under an umbrella."

Our space will not admit of our extracting the speeches at p. 82-83. They are what may be styled "awfully tall talk," and as they appear to have been received with "indescribable applause" on their delivery, and produced no little merriment on their being read aloud by us, they may be considered successful. We may find room, however, for the eulogy on Major O'Flynne:—"Major O'Flynne, than whom Britain has no more loyal subject, looks like and is a man who would ride at and over the very devil himself."

The homage, too, the author pays to woman is very striking: such are the lines addressed to Madame Cordier,

which we forbear to quote lest Mr. Swinburne should die of envy, but to which we refer our readers at p. 110.

At p. 115 is the following footnote:—"This gentleman asked me to be so kind as to deliver a friendly message to the Rev. Mr. B——, of the Argyle Meeting House Rooms. I did so in person on my arrival in London. I thought the congregation seemed to be rather showily dressed, and by no means solemn-looking."

We have given several extracts from this lively and ingenious author, because—not having read his *Via Dolorosa* (see advertisement at end of volume)—we are anxious to do justice to him now. Probably, like his brother author and poet, Milton, he has now produced both his Allegro and Penseroso; and, as it appears that the *Court Journal* of the period pronounced of our author's Penseroso that "the tender sadness which marks his muse is," &c. &c., and that "his tale of sorrow is made as sweet as may be, and told with unfailing grace and refinement," so we, in less pretentious language, can declare that his vivacity is unfailing, his experiences are wonderful, and that he has again illustrated the appositeness of the old proverb—that truth is stranger than fiction.

Westward by Rail. By W. F. RAE. pp. 391. London: Longmans. 1870.

THIS is a graphic and spirited book of travel, descriptive of a railway journey from New York to San Francisco; and from it we glean some curious and amusing sketches of the manner in which the medical wants of parts of Western America are provided for. Mr. Rae presents us with a picture of Chicago, the "Garden City," as it is called, which, in respect of municipal activity, is calculated to awaken envy in the mind of a misgoverned Londoner; and after remarking upon the general efficiency of the police, he goes on to note the impunity permitted to quacks selling nostrums. "These charlatans," he says, "ply their trade on the footpath in complete security, and with a success which is only too great.....I saw one of these impostors doing an enormous business within a stone's throw of a leading hotel. ..... He had a pill which would annihilate every known malady, and an oil which would assuage every pain." He did an enormous business with his pills and oil by giving gratis to purchasers an infallible cure for corns and bunions! At a town called Elko, in the midst of the great Humboldt plains, Mr. Rae found a Chinese doctor established, who thus (after a manner not absolutely unknown in England) advertised himself in the local newspaper:

"Ung Gen, Chinese doctor, Silver-street, will attend professionally to all who may require his services. Having been engaged in a steady practice for several years, he is prepared to cure all diseases that may come to his notice."

But here, we fear, the home parallel fails, inasmuch as Mr. Rae says that this was not "an advertising trick," Chinese doctors being "not shams here, but living realities, and, in their own way, useful members of society." A firm of druggists in Elko announced its readiness "to supply all drugs and prepare all prescriptions," or to trade in paints, oils, window glass, castor oil, fishing lines and hooks. It is to be hoped, for the bodily comfort of the Elkoites, that the store dispenser is, like his neighbour at the refreshment saloon, a "skilful mixologist," otherwise a slight mistake in oils might have unpleasant results. Of Treasure City, Nevada, we read that "Rich men could alone afford to be ill. ..... A doctor's fee would have ransomed a captive out of the hands of bloodthirsty Greek brigands. Laudanum sold at 5*s.* a drop; a single pill cost £2; for extracting a tooth £10 was charged." After this what tidings may we not expect of intending Æsculapian emigrants to Treasure City! Arrived at San Francisco, Mr. Rae ventured upon what he was assured would be a dangerous exploration of the Chinese quarter of the city. The transition from the American to the Chinese quarter was, he says, as startling as the transformation scene in a pantomime. In the joss-house, set apart as a hospital, he was "surprised to see most of the patients at work," the Chinese declining to accept illness as an excuse for idleness. It was obvious, however, that this in some respects salutary rule was carried to an inhuman extent. Of the Chinese doctors Mr. Rae says they are "not afflicted with modesty as to the nature of their powers." A sign-board projecting from a house intimated that "Dr. Hung Ly cures all diseases upstairs." In the newspapers these medicos advertise regularly. Thus Dr. Jay Hon Chung, "graduate of the highest medical college of China," announces that he has opened an office where "the most obstinate and painful chronic diseases are treated with entire success, and cures guaranteed." Dr. Chung is a benevolent person too, for he "will make no charge for medical advice to those who are too poor to pay for the same." Truly does Mr. Rae remark that "these doctors have rapidly and thoroughly imitated the style of advertising quacks in England and America." The saying that "there's a deal of human natur' in man" is clearly not limited in its application by race or clime. We prophesy that this volume will be very popular; it is written with ease and spirit, and contains a good deal to interest most people.

A Handbook of Operative Surgery. By JOHN H. PACKARD, M.D., one of the Surgeons to the Episcopal Hospital, Secretary of the College of Physicians of Philadelphia. With Fifty-four Steel Plates and numerous Illustrations on Wood. pp. 211. Philadelphia: Lippincott and Co. London: Trübner and Co. 1870.

THIS is one of those compilations from various sources for which the American press is noted. Some considerable labour has been expended by the author, and a good deal of expense doubtless incurred by the publisher, in bringing together from various authors the drawings which illustrate the text. The result, however, is not satisfactory; for the attempt to bring the whole range of operative surgery within the compass of a volume of the size before us, must necessarily prove abortive. The descriptions of the several operations are of course very brief. The author has not attempted to discriminate between the several operations when more than one is described, or to lay down any rules by which the inexperienced surgeon may be guided in the choice of his proceeding. Though useful as a book of reference, therefore, the work will hardly supplant any of the ordinary authorities on practical or operative surgery.

HOSPITAL FOR WOMEN.

LECTURES ON FLEXIONS, TORSIONS, AND DISPLACEMENTS OF THE UTERUS, BY DR. PROTHEROE SMITH.

LECTURE III.

WHILST showing that spino-pelvic distortions and uterine dislocations are not only often coincident, but that they may be regarded to a certain extent as cause and effect, Dr. Protheroe Smith remarked that a clear line of distinction, nevertheless, exists between such mechanical causes of displacement of viscera and those organic changes in tissue, especially of the fundus uteri, which dispose to, and produce, flexions of the uterus upon itself. Thus, when the erectile character of the vaginal portion of the uterus is too much or too often called into activity, or the cervix preternaturally lengthened; when the mobility of the fundus on the cervix at the os internum uteri is increased by laxity of

the fundo-cervical commissure, or by partial atrophy, or it becomes the subject of indurations, swellings, or deposits, or there is partial involution,—it requires but the provocation of a sudden jar, effort, or action of the lumbo-abdominal muscles to create a flexion of the uterus. In some instances, however, of long-standing uterine flexions, Dr. Protheroe Smith, after failure of ordinary means, had found the pelvic band alone sufficient to cure; whilst in others it greatly accelerated the favourable issue when, at the same time, pressure and other mechanical aids were used. In cases complicated by fibroid degeneration of, or deposits in, the uterine tissue, by subperitoneal or subfascial deposits distorting and agglutinating the uterus to the pelvic wall, as means of diagnosis and of relief Dr. Protheroe Smith mentioned the uterine sound, and the exhausting or aspiring needle trocar. He described the instruments such as he employs, and the manner of using them, together with his speculum, which allows of visual inspection and tactile examination simultaneously; and the elastic pessary, which obviates the necessity for metallic or unyielding supports. Though many cases are cured by the elastic pessary, the lecturer affirmed that he never had the amount of success in treatment as he had had of late since using the pelvic band. Though there are cases of permanent displacement in which no internal appliances would be justifiable or advantageous, still in such instances the pelvic band supplied, if not a remedy, yet often relief to the distressing backache, bearing-down, and irritation of both bladder and rectum.

After some lengthy comments on the observations made in the *Dublin Journal* on his pelvic band, in which he clearly established his claim to originality of invention, and fully explained the mechanical principles upon which it acts and the peculiarities in which it differs from all other appliances, Dr. Protheroe Smith terminated his course of lectures by enumerating the following practical conclusions as *ultimata* of belief to which future investigations might fairly be referred as to authorised landmarks, viz.:—

1. That uterine flexions and displacements prevail to a great extent, and that spino-pelvic deformity is a frequent cause of derangement of the contained viscera; therefore, to treat such ailments as displacements of the uterus, &c., by any means, without at the same time restoring the primary deformity, is irrational, and, consequently, often wanting in success.

2. That their frequency is in keeping with the advance of civilisation, and that they are, with but few exceptions, menstrual as to the period of their occurrence, seldom existing before the catamenia or happening after the cessation of menstruation.

3. That retroflexion is most common in the married, anteflexion in the single, and lateroflexion and torsion in women who have suffered long from rotation of the pelvis on the lumbo-dorsal vertebræ, and from that state in which one side of the pelvic basin is unduly and permanently raised above the other, so that the two angles formed by the spinal column and crista ilii are unsymmetrical, that which corresponds with the uplifted side of the pelvis being the most acute.

4. That their pathology does not differ from that of other organs of the body excepting in reference to the special functions of the uterus and its appendages.

5. That they are most frequently found in married women after protracted and difficult labours, in which the uterine tissue has suffered lesion, or when menstruation occurs too soon after parturition, and when women do not suckle, or when sterility exists.

6. That they are met with also in single women, with but few exceptions, not before the establishment of the catamenia, and most usually after the age of twenty-five, especially when menstruation has been uninterrupted, and excessive and too frequent, with that character of leucorrhœa which indicates chronic inflammation of the deep structures of the uterus, or with dysmenorrhœa with exudations; and the most common form in the unmarried is anteflexion, the point of flexion being at the junction of the cervix to the body of the uterus.

7. That these last-named disorders and conditions often predispose to, if they do not directly cause, flexions of the womb.

8. That the primary condition of the uterus itself forming a predisposing, and at times the exciting, cause of flexions, is hyperæmia or inflammatory engorgement, the frequent result of excessive irritation and uninterrupted menstrual efforts, or of tumours, hæmatocele, abscess or effusions, or of other diseases of proximate parts, and of dystocia.

9. That this primary condition is also frequently induced by spinal debility and displaced pelvis, in consequence of which the ligamenta rotunda, broad ligaments, and adjacent parts are subjected to undue tension and pressure, at times resulting in inflammation. Thus the uterus becomes more exposed to the weight, misdirected force, and pressure of the superincumbent intestines, &c., which condition at times forms the chief impediment to the cure of uterine flexions.

10. That inflammation of the uterus and of its appendages predisposes to malposition of the womb; and when it is partial, though acute, it causes versions, flexions, and other displacements, by contracting one or both round ligaments, or by determining deposits of serum or pus &c. within the folds of the peritoneum reflected laterally from the uterus, or anywhere subperitoneal or subfascial, where it may have the effect of drawing the organ backwards, forwards, or to one side, as it might be. As further causes of these dislocations are enumerated cysts, extra-uterine fœtation, or diseases of the bladder and rectum. As regards retroflexions specially, hypertrophy of the fundus and posterior wall of the uterus, or fibroids, fibro-cysts, and other deposits commonly situated at the cervico-fundal junction or commissure; or circumscribed atony of tissue at the point of flexion, partial inversion of the fundus and subinvolution, internal cicatrices and other results of local injuries and morbid changes in the uterine and adjacent tissues.

11. That before using the sound in diagnosis, whenever it is practicable the condition of the cervix especially should be ascertained by sight and touch, as well as that of adjacent parts; and when inflammation is discovered it should be entirely removed by bloodletting, repeated leeching, or by scarifying the part, and with antiphlogistic treatment, before any instrument is introduced in utero.

12. In employing the sound or any instrument in utero for diagnosis or for mechanical support, *extreme* care and gentleness should be observed, and *all* pain should be avoided, as such is often the precursor of pelvic inflammation.

13. In cases of flexions generally, but specially when such are impatient of internal treatment, the pelvic band, by altering the plane of the pelvis and restoring the spino-pelvic angle of 140°, often cures without any internal treatment, and is of the greatest service in removing bearing-down pains and headache, in relieving irritable bladder, piles and constipation, and otherwise in aiding the cure of displacements of the uterus, and in improving the general health.

14. That in cases requiring intra-vaginal or intra-uterine treatment, all inflammatory and other organic affections of the uterus and neighbouring viscera should *first* be removed.

15. That instrumental aid by means of the pelvic band should be employed externally whenever indicated by spino-pelvic deformity; and, *as a rule*, all intra-vaginal and intra-uterine instruments should, as far as possible, be avoided.

THE MEDICAL PROFESSION AND LIFE INSURANCE.

LIFE INSURANCE has of late years developed itself in this country to so large an extent, and the medical profession is so intimately concerned with its operations, that we have thought it worth while to make some inquiries having for their object to ascertain approximately the degree in which the profession is beneficially interested in the matter. The number of transactions taking place every year between the insurance offices and the public in the way of proposals for life policies must be enormous; and when it is remembered that to every such negotiation a medical man is a necessary party, and that its result is mainly determined by his opinion, the question naturally arises how far business of this kind operates for the benefit, commercially speaking, of the profession. Obviously, a full and satisfactory answer could only be given after an investigation such as we are not for the moment prepared to undertake. Different offices

have different methods of obtaining the medical reports which they require, and medical reporters are remunerated upon different principles by the offices. All that we have been able to do at present has been to inquire of the several life offices as to the amount paid by them to medical men in connexion with life policies during the last year, and the following table contains as much information upon the subject as we have thus far elicited. Many of the offices have not yet replied to our inquiry; some of them probably are waiting to make up their accounts. To those gentlemen connected with the undermentioned offices who so promptly and obligingly responded to our request we offer best thanks.

The table shows in all cases the amount paid in a single year by each of the offices:—

Name of Life Office.	Year.	Amount paid.
Albion	1870 ...	£282
Alliance	1869 ...	221
Briton	1870 ...	2856
Clerical, Medical, and General	1869–70 ...	666
Clergy Mutual	1869–70 ...	409
Crown	1870 ...	801*
Eagle	1869–70 ...	766
Economic	Average ...	275
Emperor	1869–70 ...	304
Equity and Law	1869 ...	271
European	1869 ...	2859
Guardian	1870 ...	141†
Hand in Hand	1870 ...	236
Law Union	1869–70 ...	444
Legal and General	1869 ...	139‡
London and Lancashire... ...	1869 ...	608
London and Provincial Law ...	1870 ...	286§
Masonic	1870 ...	197
Metropolitan	1870 ...	546
National	1870 ...	280
National Provident	1869–70 ...	855
Northern	1869 ...	1243
Planet	1869–70 ...	327
Provident...	1870 ...	1078‖
Provincial	1869–70 ...	330
Prudential	1870 ...	1277
Sceptre	1870 ...	353
Scottish Amicable	1870 ...	985
Sovereign	1870 ...	407
Westminster and General ...	1869 ...	207
Whittington	1870 ...	575
	Total ...	£20224

It thus appears that thirty-one insurance offices have paid during one year the large sum of £20,000 in fees to medical men for their reports in connexion with life policies. How many life offices there may be altogether in the country we do not know, but the total number is far greater than we have received information from, and the amount paid altogether in medical fees must consequently be far in excess of what is stated above.

A life office which pays badly for its medical information may be always set down as acting on the penny wise and pound foolish principle, for it is upon a careful selection of lives that the prosperity of an office depends.

We hope to revert to this matter on a future occasion, and shall in the meantime be obliged to any of our readers who will inform us of the scale of medical fees paid by any life office with which they may be connected.

* Exclusive of salaries to medical officers at head offices and branches.
† Exclusive of salary to Society's physician.
‡ Excluding salaries.
§ Including honorarium to Society's medical officer.
‖ Out of this sum £978 was paid in fees to medical men, the remainder in salaries.

Foreign Gleanings.

SULPHATE OF QUININE IN OBSTETRIC PRACTICE.

DR. MONTEVERDI considers (*Nuova Lig. Med.*, No. 4, 1870) that he has discovered new properties in this salt. According to the author, it acts not only as a general tonic, but also directly on the uterus, causing contractions which lead to the expulsion of fœtus and placenta. In this respect the quinine is thought greatly superior to ergot, as it does not, like the latter, act injuriously on the fœtus; nor is this all, as the quinine may be used in cases of narrow pelvis, undilated os uteri, and before the escape of the amniotic fluid. It may also be given in the hæmorrhage occurring in pregnant women, in amenorrhœa depending on a torpid state of the uterus, and in puerperal fever.

THE MANAGEMENT OF THE PLACENTA.

Dr. Chantreuil has inserted an essay in the *Archiv. de Méd.* (October, November, and December, 1870), which he entitles "Uterine Expression." We are all acquainted with Dr. Hicks's plan of combined external and internal manipulations in certain stages of parturition; here, however, we are advised to compress the fundus of the uterus steadily after the expulsion of the fœtus, so as in some degree to express the placenta, as a cherry-stone is expressed from the fruit. The essay of the author is extremely well written, and his quotations prove his reading to be very extensive. He points out the dangers of pulling upon the cord, and the risk the mother runs when the hand is introduced into the uterine cavity. But he does not allow sufficient importance to the spontaneous extrusion. Dr. Chantreuil reminds his readers that R. Wallace Johnson, in 1769, recommended a pressure of the same kind, combined with some traction of the cord. But Prof. Crédé, of Leipzig, is the first who advised the practice in all cases. Dr. Chantreuil has collected no less than 540 cases in which uterine expression has been used by himself, and found that the placenta came away 32 times immediately after parturition; 78 times one minute afterwards; 175 times in two minutes; 109 times in three minutes; 50 times in four minutes; 47 times in five minutes; 20 times in seven minutes; 4 times in eight minutes; 11 times in ten minutes; 3 times in twenty minutes; and once in twenty-five minutes.

ZINC WATER-TANKS.

The *Lyon Médical* contains an article, by M. Zinrek, who has examined water which had long been kept in such tanks. He has found that the water dissolves so much the more zinc as it contains more chlorides, such, for example, as the chloride of sodium. The water also takes up larger quantities of zinc in proportion to the length of contact. Boiling does not, however, precipitate the zinc from water charged with the metal. A sample of the former was tried, in which the chlorides were in small proportion, but which had been a long time in a zinc tank. As much as fifteen grains of zinc was found in each quart. To prevent this state of things, the author advises the zinc tanks to be coated inside with an oil paint, the basis of the paint being ochre or asphalte. No minium, ceruse, or carbonate of zinc should, however, be used. Fifteen grains in a quart seem an enormous proportion, nor does the author say whether he found the actual metal or a salt of oxide of zinc.

New Invention.

INHALER FOR BICHLORIDE OF METHYLENE.

WE have received from Messrs. Krohne and Sesemann an inhaler contrived by Mr. Rendle, the surgical registrar of Guy's Hospital, for the administration of bichloride of methylene. It consists simply of a conical leather cup, shaped so as to fit the mouth and nose, and abundantly perforated with holes. In this fits loosely a flannel bag, upon which the agent is poured, and from which it rapidly evaporates as the air is drawn through it by respiration. When not in use, the leather cup serves as the cover to a small tray containing a bottle of the methylene, a graduated bottle, and a minim glass; and the whole, being fastened with a strap, forms a very convenient and portable arrangement for producing anæsthesia of a temporary character.

THE LANCET.

LONDON: SATURDAY, APRIL 29, 1871.

WE publish this week two letters, one from the Honorary Secretary of the St. Andrews Medical Graduates' Association, the other from the Professor of Medicine in the University, on the subject of the proposal to restore to St. Andrews its old power of conferring degrees in Medicine after examination only. Both our correspondents call attention to certain points of detail on which we appear to have fallen into error; and we the more gladly admit their corrections, since we are sure that these errors are widely prevalent. Dr. SEDGWICK, moreover, seeks to found an argument for increase of privilege upon our admission that many men develop in practice a merit that should be rewarded by a medical degree; and he pictures the possible hardship to meritorious men who may be now shut out. Both he and Dr. BELL assure us that their University would institute very stringent examinations, by which only proper candidates should be admitted to the calendar. Dr. BELL, however, thinks it right that the question should be decided upon public grounds alone; and, this being so, we cheerfully join issue with him in support of the views that we have many times expressed.

It is worth while, in the first place, to look at the matter by the light of history. One need not be very old in order to remember a time when the title of "Doctor" not only served the purpose of telling the public that its holder was a physician, as opposed to a surgeon or a general practitioner, but when it also told them that he had received an academic education as the basis of his professional training. As a rule, the Doctor was a graduate of Oxford or Cambridge, and, in respect both of intellectual and social qualifications, was all that such graduation implied. This being so, the title was naturally held in high esteem. In process of time, however, it became known that certain Scotch universities would, for a consideration, confer this coveted title without residence upon men who had neither received an academic education nor intended to act only as physicians, but who were required to be already qualified to practise in England, and to pass an examination which, as far as questions were concerned, was fairly comparable to that of the Apothecaries' Company. The arrangement was a direct temptation to many practitioners to strive to seem something which they actually were not; and scores, perhaps hundreds, of young men who had passed the College and the Hall not without difficulty, and whose general education had been of the scantiest, ventured upon the additional expenditure required for a St. Andrews degree, in the hope that the word "Doctor" would induce the public to regard them as belonging to a higher grade of the profession. The nuisance reached such a height that the unlearned Doctors threatened fairly to swamp the learned ones, and the very title became almost discreditable. If the practice of a few years ago had been continued, it must have led to one of three results: every general practitioner must have taken a Doctor's degree; or the worthlessness of the degree must have been made so plain that no one would care to take it; or a new title must have been invented for the highest grade of the profession. The second of these results was actually in course of being brought about; because, although a certain number of good men took the doctorate every year, yet, as a rule, successful general practitioners abstained from doing so, and left the doubtful honour to others whose places were less secure than their own. Fortunately, however, the restriction of the number of these degrees to ten annually came in time to arrest the downward progress of events; and the St. Andrews doctorate bid fair to assume a changed position in the estimation of the profession.

Under such circumstances, we think it would be more than unwise to incur the risk of any return to the state of things which formerly prevailed. It is quite true that every year produces a certain number of men who are fitted to step from an inferior to a higher grade of the profession, and who might rightly assume a superior title. But such men are more likely to be of twenty years' standing than of five; and the proposition which we are discussing would not elevate them, but would only lower the doctorate. No single examination in professional subjects can be so framed as to exclude ignorant men; and we speak from sufficient evidence when we say that the examinations at St. Andrews, even in recent years, however well intentioned, have not excluded them. Nor can we see any reason why one licensing body should alone be entrusted with the lucrative privilege of ticketing ambitious practitioners. If there be indeed a grievance, if there are many men who not only wish to take a title now denied to them, but who would adorn and dignify it by their learning and character, why should they not receive promotion at the hands of the same bodies by which they were originally licensed? If THE LANCET Bill were to become law, the Colleges of Physicians and Surgeons might attract to themselves the whole of the new licentiates by some proper and reasonable provision for conferring a higher title upon men who had fairly earned a claim to higher rank. But the claim should rest upon something more than an examination which, even if severe, might be passed by the aid of six months' cramming; and it would be very desirable that no title implying the possession of learning should ever be bestowed upon any who are in fact unlearned. The standard of preliminary education for the profession has steadily risen, and promises to rise still higher; so that an illiterate "doctor" will every year become more and more an anomaly and a disgrace. We regret to say that such are to be found among those who, within the last ten years, have not only graduated at St. Andrews, but have even graduated there with honours. We think the possession of the title of "doctor" by such men is a greater evil than its being denied to others who are worthy of it. A practitioner who possesses the confidence of the public will seldom care greatly what he is called; and the motto *esse quam videri* is more applicable to our vocation than to most of those which men pursue.

THE experience and practice of the Rotunda Lying-in Hospital must always be a matter of great interest to the profession. This is the largest of our British lying-in hospitals, and exceeds any of the others in importance as a centre of obstetric doctrine, and as an example of puerperal hospitalism. We congratulate the Master, Dr. GEORGE JOHNSTON, on the general results of the practice of the hospital in the year ending Nov. the 5th, 1870. The mortality has been considerably less than the average mortality of the hospital. Thus out of 1087 deliveries, of which 344 were primiparæ and 743 pluriparæ, there were 17 deaths, or a proportion of about 1 in 64, the average being 1 in 31¼. Much of the mortality that did occur was clearly of such a nature that the hospital could not be blamed for it. Moreover, the fatal cases of metria, characterised by symptoms of pyæmia or blood-poisoning, were singular—that is to say, in no one instance did the disease spread to any patient, either in the ward or the hospital. This, indeed, is the point of Dr. JOHNSTON'S report; and he is quick to come to it, and comes back to it again and again. He regards the report for the year as a further proof of the following propositions, advanced on a former occasion:—

1. That zymotic disease (puerperal fever) does not prevail endemically in large lying-in hospitals.

2. That puerperal fever, when it is epidemic, does not necessarily make its appearance in great maternity hospitals in the first instance.

3. That where perfect cleanliness in every particular is maintained, and labour not allowed to proceed too far unaided, there is no miasm emanating from the puerperal patient.

4. And that where there is sufficient cubic space of air for each individual, and thorough ventilation observed, the wards can be kept without a hospital atmosphere.

It is only fair that a great institution like the Rotunda, which certainly serves many useful purposes, should have the credit of healthiness whenever it can be fairly claimed. But we must not attach much importance to the experience of a single year, or even of a single mastership. We know well that the most unhealthy hospitals have intervals of comparative exemption from pyæmic disease, and that even in such institutions there are fluctuating degrees of unhealthiness. The mortality is less, by more than one-half, than it usually is. And this result is the more gratifying when two things are considered: first, that the lives of many of the patients who ultimately died seemed compromised on admission into the hospital—as by extreme depression, or by prolonged hæmorrhage, or other obvious disease; secondly, that while the hospital was comparatively free from puerperal disease of the zymotic or blood-poisoning order, there was an extensive prevalence of zymotic disease outside. This, indeed, is one of the very interesting points in the small zymotic mortality of the hospital in the year 1870. If puerperal fever has its most frequent origin in the common zymotic diseases, and especially scarlatina, how came it to be so scarce last year in the lying-in hospital in Dublin? Dr. JOHNSTON shows the number of zymotic deaths happening in each of the various municipal districts of Dublin, and then gives the deaths occurring in women delivered in the hospital for each district. Unfortunately, he does not give other particulars of great importance. There are especially two which should be supplied. First, what is the population of these districts? Secondly, what was the amount of puerperal disease happening in them to women delivered at their own homes? From the North City District, 259 patients were admitted; out of these there were 3 deaths of a zymotic order, while 164 deaths from zymotic disease—non-puerperal, we presume—in the district occurred. From No. 2 District, 296 women were admitted, without any deaths; while there were 148 deaths from zymotic disease in the same district. It is certainly remarkable that, with an unusual prevalence of zymotic disease in the city, there was such a small mortality from it in the hospital. The mortality in the hospital did not represent the whole of the sickness of a doubtfully zymotic kind. For example, there are only 3 deaths attributed to peritonitis; while there were 29 cases. But it may be questioned whether in outside practice 26 cases of puerperal peritonitis would have recovered out of a total of 29. The comfortable idea suggested by Dr. JOHNSTON'S report is something like this—that in the hospital, during epidemic periods, there may be a purer atmosphere for the poor women who use it than in their own homes. He specifies the case of one woman who came from a house in which scarlatina prevailed. There were 256 deaths from zymotic disease in her district. She went through her confinement without a bad symptom, and was discharged, as all the other patients in the ward were, and as is the custom in this hospital, on the eighth day. One case of this kind, of course, does not count for much; but the fact of the great prevalence of zymotic disease outside, and the entire absence of any certain case of it inside, the hospital, is a point to be admitted in judging of an institution which has been, with great justice, very severely criticised of late years. We hope Dr. JOHNSTON will take some trouble to ascertain and to publish the nature of the puerperal disease which obtained in Dublin itself, outside the hospital, in the year 1871. By doing so he may possibly show that, under certain circumstances, the lying-in hospital may become a sort of asylum; and he may make an important contribution to the further elucidation of the relation of puerperal and zymotic disease.

We have left ourselves little space for the notice of anything distinctive in the medical or surgical practice of the Rotunda, but two or three prominent points may be mentioned.

The use of the forceps grows steadily. Those who know the practice of the Rotunda will agree that the masters have not generally been over-eager to use the forceps. For example, Dr. JOSEPH CLARKE used the forceps fourteen times in 10,387 cases; in Dr. LABATT'S time, from 1815 to 1821, the forceps were not applied once, though there were 21,867 births; Dr. COLLINS used the forceps twenty-four times in 16,414 cases; and Drs. M'CLINTOCK and HARDY record eighteen instances in which the forceps were employed out of 6634 cases. Dr. JOSEPH CLARKE said he was persuaded that a fair opportunity of using the forceps with good effect would not occur to a rational practitioner in one of a thousand cases. And yet Dr. JOHNSTON, in the 1087 cases delivered last year, found it necessary to use the

forceps eighty-three times; and we do not see any indication that they were used unnecessarily or prematurely, unless perhaps in one fatal case, where they seem to have been applied while the os uteri was very imperfectly dilated. Dr. JOHNSTON says they were always influenced by the length of time the patient was in the second stage, never allowing it, in the generality of cases, to exceed four hours. This seems to us ample time, and in some of the cases recorded it was perhaps too much. It is clear that Dr. JOHNSTON finds the forceps a much safer and more useful instrument than it has been the Dublin practice to pronounce it, if we except Dr. BEATTY, Dr. JENNINGS, and a few others. In this he is in accord with nearly all recent obstetric authorities. The shortening of the second stage of labour is, in some sense, the most important part of the art of midwifery.

As regards the strictly therapeutical part of the Report we have little to notice. Dr. JOHNSTON says that all the sickness was of an asthenic type, requiring a nutritious diet, such as beef-tea and chicken broth, with the use of stimulants, wine or brandy. The treatment of peritoneal cases consisted in turpentine fomentations and linseed-meal poultices, together with turpentine (one to two drachms, with opiates) by the mouth. Where objected to in this way, it was given by enema; and where the pulse ran high and frequent the tincture of aconite in small doses was added. In some few instances mercury with chalk was given, with Dover's powder, but it was not relied on. Clearly, and most properly, mercury is no longer in the ascendant for such cases. This treatment was successful, as out of twenty-nine cases twenty-six recovered. The pyæmic cases were treated similarly; of these three died and two recovered. Perhaps there is a little tendency to routinism in the treatment in this hospital, as in most others. And in one case routinism seems to us to have been carried to a great extent—that of a patient with convulsions, admitted comatose. Amongst other remedies administered were chloroform and bromide of potassium, and belladonna by enema. These seem to us questionable remedies for a comatose patient, even if administered with a view of dilating the os uteri.

But, on the whole, Dr. JOHNSTON gives a very good account of his stewardship for the year just closed.

THAT a good article must be well paid for is a truism; but the various applications of the doctrine sometimes escape observation. A good medical education costs money, as we are all pretty well aware; but yet, compared with the cost of education in any other profession, the charge is comparatively small. In days gone by, large premiums were paid by pupils to the medical masters from whom they really learnt their profession; and but small sums were expended on lectures and hospitals, which were looked upon rather as ornaments than as essentials. Now, however, all is changed. We suppose hardly one medical student in fifty has even been apprenticed, and certainly still fewer have "served their time"; the bulk of medical students deriving the whole of the medical knowledge necessary to entitle them to their diplomas from the medical school to which they are affiliated.

This brings, then, the cost of medical education, *quoad* fees, to a sum varying from £70 to £100, according to the school selected. Now, it is notorious that the smaller and cheaper schools are utterly unremunerative to the teachers in them; and any deficiencies in the curriculum are necessarily condoned by the low figure at which the duties are paid. This has been the case for many years past; but with the modifications recently introduced into the medical curriculum, particularly by the College of Surgeons, we fear it will be impossible for any of the schools to maintain their fees on their present basis. It unfortunately happens that, owing to the utter want of any central authority in the existing General Medical Council, the licensing bodies have no action in common; and thus, whilst the College of Surgeons modifies its requirements, the College of Physicians and the Apothecaries' Society keep up their old arrangements, and, consequently, the teacher and pupil will have to comply with regulations which necessarily clash.

To give one or two examples. The College of Surgeons requires, for the future, attendance on only one course of lectures on physiology, substituting practical physiology for the second course of physiology formerly required. But the College of Physicians and the Apothecaries' Society still demand two courses of lectures on physiology; and the student will, accordingly, have to pay for an *additional course*—viz., practical physiology. So, also, in the case of surgery. The College of Surgeons now requires one course of surgery and one of practical surgery; whilst the College of Physicians requires *two* courses of surgery: *ergo*, the student must take out all. Then pathological anatomy has been added very properly as a distinct subject instead of being bound up with physiology; and the duties of clinical teachers have been increased by requiring every student to receive individual instruction on actual patients under the direction of a teacher.

All these additions must, we think, in fairness to both teachers and taught, be expected to increase the cost of medical education. If a school is to be arbitrarily bound to charge no higher fee than that fixed when a lower scale of education was required, it must follow that the new subjects will be scamped, and the ill-paid teacher will produce an ill-taught pupil. We are far from wishing to see the cost of medical education so increased as to be beyond the means of any but the sons of wealthy parents; and we have little fear but that wholesome competition will, as now, make a graduated scale of fees in rival schools. Still, in the interest of both pupils and teachers, we think the time for some revision of the scale of medical teaching fees has come; and we would counsel a consentaneous action among the several teachers, in the interest of scientific progress, rather than an unseemly competition with a view to attract pupils by underselling competing institutions.

THE character of our recruits for the army has recently been made the subject of some newspaper comment; and the youth and immature frames of those enlisted have been dwelt upon. Now, we think a little consideration will serve to show that it is almost hopeless to expect that any but

very young men will enlist into the army. Young men that have already served their time in trades, or selected a particular course of life, or embarked in definite occupations of various kinds, cannot be expected to forego these for the purpose of embracing a life in the army, unless they have failed and are in want, or in trouble, or, shall we say, have been disappointed "in love." We must take young men at the time they are most ready to come; and so that they are healthy and of a good physical character, there is no reason why they should not make soldiers every bit as good as their predecessors have been. Now that so much care is bestowed upon sanitary matters in the army, and the men inhabit quarters where they are secured a fair amount of cubic space and tolerable purity of atmosphere, with good food, there is no reason whatever why the raw material, if it be only a healthy material, should not be worked up into fine battalions. Youth, however, is attended with grave dangers in respect of service abroad in tropical climates. As we pointed out on a recent occasion, the large proportion of young men present in our battalions, and especially in those recruited up to their full strength previous to embarkation for service in India, threatens to become a subject of some importance. Medical officers in India blame a good many things for the unhealthiness of our European troops there; but they appear to be in accord on one point—viz., that very young soldiers are unfit to encounter a climate like that of the plains of India; they fall victims to epidemic diseases, or they swell the list of patients in hospitals, or of convalescents at hill stations, or of invalids to be brought back to England by the overland system of troop ships. Regiments newly arrived in India generally suffer disproportionately to others; and this is particularly the case when the battalion happens to contain a large number of young men recently recruited. The first hot season probably renders soldiers of this stamp inefficient; they become enervated, anæmic, and predisposed to diseases, such as fever, dysentery, cholera, or heat apoplexy; and it is astonishing how long a man or a regiment may retain this predisposition to disease when once it has been acquired. Now, it is on this account that we regard Mr. CARDWELL'S new Army Regulation Bill as a questionable measure. If soldiers can pass into the Reserve at the end of three years' service their places must be filled up by others, who will almost certainly be lads of the recruit age, and it follows that our army will be a younger one than ever. Of course the War Minister would urge that he could check this tendency by limiting the number of those who should be permitted to join the Reserve after such short periods of service. Still, it seems ridiculous to legislate by means of rules that have to be constantly set aside. We contend, then, that our recruits are, and must continue to be, mainly composed of very young men. Practically speaking, no Government probably can overcome this; the point of our observations is—that such men are unfit for military service in India under the plan at present in force of locating regiments and bodies of troops in the plains; and Mr. CARDWELL will have to encounter this difficulty, which can, to a certain extent, be surmounted by acting on the principle that as many troops as possible must be quartered on the hills.

Medical Annotations.

"Ne quid nimis."

THE EXAMINATIONS OF THE COLLEGE OF SURGEONS.

WE are happy to announce that the newly admitted members of the Royal College of Surgeons of England, who last week satisfactorily completed their examinations, were examined in the diagnosis of surgical affections on living patients, drafted to the College for the purpose from several of the metropolitan hospitals. This very satisfactory consummation of our efforts to improve the standard of examination of the profession is deserving of more than a passing notice, and we congratulate the President and the Examiners of the College on having at length carried into effect a much needed reform.

The "practical examination of patients," as it is officially termed, cannot be strictly called a clinical examination like that for the Fellowship, since the candidates are not taken to the bedside of the sick. Great practical inconvenience would doubtless arise from any attempt to pursue that system with large numbers of candidates, and we are not disposed to complain of the method adopted, though it necessarily limits somewhat the class of cases to be examined. Still, if a young man can show a practical acquaintance with the ordinary run of cases which present themselves in out-patient practice he must needs be no mean surgeon, and the stimulus which this new test will give to the study of everyday cases will, we think, prove a great boon to the patients of future practitioners. The new regulations of the College which require every student to be individually engaged at least twice in each week in the observation and examination of patients at a recognised hospital during not less than three months early in his career, will prove a most suitable preparation for the practical examination now inaugurated; and as in all probability the first summer will be the period selected in most schools for imparting this instruction, we may hope that during the next three months our freshmen will cultivate a taste for diagnosis as well as for cricket, boating, or athletics.

THE NEW ST. THOMAS'S HOSPITAL.

OUR readers will see in our advertising columns the official announcement of the additions the Governors of St. Thomas's Hospital propose to make to their staff. They announce vacancies for a physician, an assistant-physician, a surgeon, and two assistant-surgeons. With the view, it is stated, of encouraging men of established reputation to come forward, the Governors have resolved to forego the gratification of being canvassed; they have cast upon the Grand Committee the concentrated responsibility of selecting candidates for recommendation. We are informed that they wish it to be distinctly understood that the course is open, and that their sole desire is to justify themselves before public opinion by making the best possible appointments. Mr. Croft, the senior assistant-surgeon, has undeniable claims to promotion, which will no doubt receive favourable consideration; but every other office, we are told, is perfectly open to competition.

We hail as a good omen this prompt acceptance of the counsel which we lately tendered to the authorities; and trust that the elective committee will spare no pains to obtain accurate information about the relative merits of all candidates who may offer themselves. Upon the discrimination and probity of the committeemen the future position of the hospital will much depend; and it would be difficult to devise any more responsible duty than that which is

about to devolve upon them. We make the suggestion with much diffidence, but we should feel increased confidence in their fitness for this duty if they would lay aside the absurd title of "Grand." It seems a little likely to fill those who hold it with exaggerated ideas of their own wisdom; and it is much too near the sublime to escape from the ridiculous.

THE METROPOLIS WATER BILL.

THE doubt which we expressed not long since as to the sincerity of the Government in regard to this Bill has been more than confirmed by Mr. Bruce's extraordinary statement in the House of Commons on Tuesday evening last. In answer to Mr. Crawford, who had given notice of his intention to oppose the second reading of the Bill, Mr. Bruce said he "would take into consideration the suggestion for withdrawing it and proceeding with another Bill." What sort of measure this proposed substitute is to be has not been explained, but we shall probably not be far wrong in supposing that it will be much less satisfactory to everybody but the water companies than the Bill now before Parliament. But why should the interests of six or seven commercial companies be thus suffered to override the interests of the three million consumers of water in London? We would beg some independent member of Parliament (if there be such an one to be found) to put this question to Mr. Bruce, and to insist upon a straightforward answer. The fruits of the absurd procrastination of the Government in respect of this Bill are now manifest. "Vested interests" have had time given them to organise a formidable opposition, sufficient to frighten the Home Secretary into a temporising policy. Mr. Bruce's unfortunate inability to comprehend the precise moment when deliberation should give way to prompt action has thus, in all probability, doomed the metropolis to remain for another year at the mercy of its water companies, who are in some districts doing already, and without giving any of the corresponding benefits, just what the opponents of the Bill have asserted would result from its operation—namely, raising the water-rates.

THE MEDICAL REPORT UPON THE FENIAN PRISONERS.

IT will be remembered that last year, owing to the representations made in the Irish press with regard to alleged improper treatment of Irish political prisoners in English convict establishments, a Commission was issued under the chairmanship of Lord Devon to inquire into these allegations. The Commission reported generally that no improper treatment had been inflicted upon these prisoners, and this result was made known at the time; but the Report and Appendix have only just been presented to Parliament, and we propose to notice them now so far as they have a professional interest. Dr. Lyons, of Dublin, and Dr. Greenhow, of London, were members of the Commission referred to; and the latter gentleman's remarks are embodied in a lengthy memorandum in which he expresses dissent from some of the conclusions of his fellow-commissioners.

Having visited the convict prisons, and examined personally the several Fenian convicts with a diligence which is attested by the fact that upwards of 16,000 questions and answers are recorded, the Commission made its report, and on the subject of diet found little to complain of, except that the tea was "of an inferior character, owing to its being kept too long in the cauldron before use!"

On the subject of medical attendance the Commissioners were satisfied as to the care and attention received by the prisoners. They object to some of the medical officers having only one medical qualification, and suggest the more frequent inspection of the prisoners on the sick list.

Dr. Lyons' memorandum refers exclusively to the convict O'Donovan Rossa, and merely confirms the general conclusion of the Commission that he was a most troublesome person to deal with, and that he set all prison rules at defiance. Dr. Greenhow goes more into detail, and pens an elaborate defence of the whole penal system against one or two very minor animadversions in which his fellow-commissioners had indulged. He maintains the prison diet to be ample, and dissents from the recommendation for the establishment of separate infirmary kitchens. On the subject of more frequent medical inspection, to which we have referred above, Dr. Greenhow disagrees *in toto* with his fellow-commissioners, and goes carefully through all the allegations of the petition respecting individual prisoners, showing that every statement regarding alleged injury to the convicts' health was founded in error. We look upon these medical criticisms of the evidence before the Commission as most valuable; and now that the majority of the individuals in question are being made heroes of in America, it is not a little refreshing to find that the common sense and medical acumen of one of the Commission satisfactorily gauged the extent to which the so-called martyrdom of the Fenian heroes had been pushed.

PROFESSOR HALFORD ON SNAKE-BITE.

PROFESSOR HALFORD complains in the *Melbourne Argus* that his specific has not met the enthusiastic approval of THE LANCET, and urges on his medical brethren the duty of injecting into the veins of victims to snake-bite even larger doses of liquid ammonia than he has hitherto prescribed. We adhere, however, to our opinion that Professor Halford's induction is not so scientifically complete as to warrant implicit confidence in his practice—an opinion, moreover, corroborated by that of Professor Fayrer, of Calcutta, who, with every motive to receive Dr. Halford's specific favourably, cannot persuade himself to adopt it, or to recommend its author to the Indian Government as the discoverer of a remedy which is as greatly desiderated in that peninsula as in Australia itself. Professor Halford cites a few cases in which the injected ammonia produced results as favourable as if the remedy had been administered by his own hands; but these cases are still vitiated by his failure to establish—first, the poisonous nature of the biting snake; secondly, its having inflicted the bite when its poison-sac was full (that is to say, unexhausted by previous bites); and, thirdly, the superior efficacy of the ammonia injected into the veins over the ammonia (and brandy) exhibited by the mouth. Besides, on the old principle of "what is sauce for the gander is sauce for the goose," injected ammonia should be as efficacious for the snake-bitten Hindoo as for the snake-bitten Australian. But such is not the case; and so Professor Halford still fails to command the professional adhesion of England and the official reward of Calcutta.

A NEW INDIAN HILL STATION.

IT is satisfactory to note that new and eligible sites on the hills in India, for the residence of British troops, are now being examined and reported upon officially from time to time. Dr. Ringer, of the 7th Bengal Cavalry, speaks most favourably of Puchmarree, situated about thirty miles from the station of Bundheree in the Sutpoora range of hills. The soil is hard, porous, and sandy, and grows potatoes well, and there are good open places suitable for barracks; the water, as regards supply and quality, is excellent; the climate in the hot season delightfully cool; the

natural drainage good; the approach from Bundheree very easy and gradual. There is no swampy ground, or any indication of malaria. The inhabitants are healthy, and free from cachectic disease of any kind. Dr. Ringer, who formed one of a committee appointed to report on the site, says in the *Indian Medical Gazette* that the committee, after a fortnight's exploration of the plateau and surrounding country, "cannot conceive a more healthy, cheerful, and in every way favourable locality for British troops." Provided, we may add, the natural healthiness of the spot is not permitted to be polluted, if occupied, through the neglect of the commonest sanitary precautions, as in many instances in other parts of India, under the absurd belief that hill stations require no such precautionary hygienic measures as are everywhere else necessary.

THE MEDICAL STAFF AT THE SMALL-POX HOSPITALS.

WE venture once more to protest against the mode in which the Small-pox Hospitals are officered. All the medical officers are greatly overworked. Some of them have not been able to leave the premises for weeks, and at least one has been incapacitated by overwork. At Stockwell Fever Hospital there are nearly 300 patients under two medical officers, and when other beds and tents are added and a third medical officer is appointed, there will be 450 patients under three medical men. At Homerton Fever Hospital, there are 240 patients under two medical officers, and one of them has to dispense the whole of the medicine. We believe that no medical man can do justice to more than eighty patients. For their examination alone this will take five hours and twenty minutes, if he give them an average of four minutes each—not too long for him to observe the temperature, record the actual state of the patient, and prescribe the remedies. Then there are patients to take in, diet lists to make out, nurses to supervise, general orders and answers to give to officials, and returns to make. Lastly, there is an evening visit to the wards, and perhaps a dozen patients to re-examine and prescribe for. No man can do this in a small-pox or fever hospital, day by day, without suffering in health; and we venture to believe that it would have been far wiser to put these large hospitals under the charge of a sufficient number of visiting physicians, leaving the administrative duties to be done as usual by house-surgeons. If this course is not taken, some increase of the staff must undoubtedly be made.

UNIVERSITY COLLEGE HOSPITAL.

THE anniversary dinner of this charity was held in Willis's Rooms on Wednesday evening. Professor E. A. Parkes, the chairman, drew an animated picture of the hospital from its rise, in 1828, through its uninterrupted course of usefulness to the present year. The number of patients relieved during the last twelvemonth, for example, was 30,475, including 1689 in-patients. The annual expenditure being £9000, and the certain income not more than £5000, the annual deficit (£4000) ought to be met in a much more effective manner than, to the discredit of the lay community, it was. Students' fees were still the chief source of the hospital's maintenance—a fact which the wealthier North Londoners should not permit to remain. Among the chief toasts of the evening were the "Medical staff," proposed by Sir F. Goldsmid, and acknowledged by Professor Erichsen; and the "Lady nurses," under the direction of the Superior Mother of All Saints, proposed by Sir W. Jenner. "No nursing," said Sir William, "could be better than that performed in the hospital by ladies highly born and gently nurtured." When paid nurses committed a fault their first care was to conceal it; but if the lady nurses made a mistake they immediately apprised the physicians, who were often able to remedy it in time. Dr. Parkes's spirited appeal elicited from the company subscriptions to the amount of £1000.

OPERATIONS BY STUDENTS.

THE examiners and teachers of the rising generation of surgeons have lately become awake to the strange inconsistency of its not having been necessary for candidates for surgical diplomas to prove themselves surgeons in fact. Of the vast numbers of men who have up to the present time withdrawn from hospital training into private practice, the majority had not even undergone a complete course of instruction in operative surgery on the dead body, and a comparatively few ever used the knife for any other purpose than dissection until the health and lives of patients began to depend as much on their coolness of judgment and skill of hand as on their theoretic knowledge.

We therefore note with much satisfaction an incident of some novelty which is mentioned in one of our hospital reports of this week as having occurred in the operating theatre of one of the principal London hospitals—namely, the performance of an operation by a dresser in the presence of his fellow-students, and under the immediate eye of his teacher. We understand that it is the intention of this gentleman to accord to those of his dressers whose diligence and skill merit recognition the privilege of performing, during their term of office, a few simple operations in the hospital theatre, and have little doubt that this liberal experiment will prove to be, not only a great incentive to diligent and careful study, but the best possible means of cultivating those qualities which are peculiarly necessary to the composition of a good surgeon.

THE ROYAL ACADEMY.

LEAVING it to the art critics to form their estimate of this year's exhibition as compared with its predecessors, we may invite the attention of our readers to the works of medical interest on the walls. Mr. Yeames's picture of Dr. Harvey and the Children of Charles I. at the Battle of Edgehill will command many admirers. Mr. J. P. Knight's portrait of the late Dr. Joseph Henry Green, the President of the College of Surgeons, and the distinguished occupant of many other posts, active and honorary, is well worthy of adorning the splendid new building of St. Thomas's, where its subject was for many years senior surgeon. Another most interesting contribution to medical history is Mr. C. W. Cope's picture of Mr. Guy conferring with Dr. Mead and the architect, Mr. Stear, upon the plan of the hospital which he founded, and which has since borne his name. Not less attractive in another style is Mr. E. M. Ward's "Doctor Goldsmith," representing the author of "She stoops to Conquer," in his solitary case of medical practice, where he "stooped" to feel his fair patient's pulse, but with a different *dénouement* from that of the play. The Deputation to Faraday requesting him to accept the Presidentship of the Royal Society, is a well-pronounced group of distinguished *savants*, by Mr. Armitage. "A Medical Student of Edinburgh," by C. Martin, is, we hope, an improvement on the specimens who mobbed the lady-students last session; while Mr. Pearce's portraits of Dr. Charles Murchison and Dr. Robert Lee will be appreciated by the numerous friends of those gentlemen. In the sculpture-room, Dr. S. T. Chadwick and Professor Owen may be admired as works of art, even after Mr. G. E. Ewing's very fine "Prince Adolphus of Teck," and "Prince Albert Victor of Wales."

And the medical interest of the exhibition will not be exhausted till the visitor has looked at the "Sketch for a Cottage Hospital intended to be erected as a memorial to the late Marquis of Westminster."

LUNACY REGULATION (IRELAND) BILL.

SIR DOMINIC CORRIGAN has drawn attention to a most unjust imposition which is proposed to be put upon the medical profession of Ireland by the Lunacy Regulation Bill. By it the Lord Chancellor in Ireland is empowered to fix and pay the salaries of all officers, clerks, registrars, medical and legal visitors, &c., employed in carrying out the Act; and he may also give them a superannuation allowance not exceeding two-thirds of the annual salaries after a service of twenty years, the whole to be paid out of the Lunacy Fund. But the Act also requires that every doctor, surgeon, or apothecary who shall sign a certificate of lunacy shall, within one week of signing it, transmit by post to the office of the Registrar of Lunacy a notice or return setting out in full the certificate so signed (with his own name, profession, and residence); the name, residence, and description of the person so certified to be of unsound mind; the name, residence, and description of the person by whom he was employed to give the certificate; the purpose for which the certificate was given; the place where the person certified as of unsound mind was examined by him; the nature of the alleged lunacy, and the person or persons from whom he received information as to the lunacy of the person by him certified to be of unsound mind, together with all such other particulars and circumstances as shall be directed by the Lord Chancellor. And he is to be paid for this service *nothing at all*. Nay, worse than that, for it is provided by the 8th clause that any person who shall neglect to transmit to the Registrar such return within the said period of one week shall be liable for such offence to a penalty not exceeding £10.

If after this a medical man in Ireland signs a certificate of lunacy, he must be a greater simpleton than we can suppose to exist amongst the profession in Ireland. Sir Dominic Corrigan proposes that the Lord Chancellor shall have power to pay the medical man making the return a reasonable remuneration out of the Lunacy Fund. We wish him success. It is satisfactory to know that the profession has now in Parliament some vigilant defenders of their interests, and that it is no longer possible for Government to thrust upon us unpaid duties without protest on their part.

DEFICIENCY OF HOSPITAL ACCOMMODATION.

THE Hospital Committee of Stockwell have extended the number of patients far beyond the limit for which the hospitals were originally constructed. Without wishing to urge this as a complaint — for indeed almost any hospital arrangement is an improvement upon the retention of small-pox cases in the wretched dwellings of the poor—we would, nevertheless, offer a word of warning against the dangers which may ensue. There are, for example, 186 patients in the Small-pox Hospital in a space intended only for 104. Many of the wards are crowded. All the day-rooms are occupied by beds, and the corridors have also beds placed in them. The state of the air is not by any means so good as it should be; and if erysipelas once broke out the consequences might be very disastrous. In the Fever Hospital matters are quite as bad, and by the time the tents and corridors are occupied, there will be 450 patients on premises originally adapted for only 170.

This is a state of things which ought not to be tolerated. It points to the necessity of the Metropolitan Asylums Board taking more energetic steps to meet the requirements of the epidemic. Hitherto the managers have contented themselves with providing from hand to mouth. They seem to forget that London in a large place, and that 2000 beds constitute a small provision for an epidemic amongst three millions and a half of people. In the parish of Liverpool, with a population of a twelfth that of London, the vestry provided 700 extra beds for fever and small-pox patients in less than two months, and at that rate London would require 8400 beds. If only 2½ per cent. of the people in London are unprotected, and assuming that they will all have small-pox before the epidemic ceases, we have to look forward to the occurrence of 80,000 cases. Of these there have been, up to this time, about 25,000, of whom only some 5000 or 6000 have been admitted to the hospitals. It is certain, therefore, that the hospital accommodation should be at once increased.

DRINK AND ITS REMEDY.

Fas est et ab hoste doceri is a maxim which the agitators against the Contagious Diseases Acts, and for the frustration of Mr. Bruce's Licensing Bill, certainly cannot be accused of plagiarising from the supporters of those measures. For one meeting held in favour of the latter, the contagious diseases' and publican interests hold ten; and with the highly probable result of intimidating the Government into acquiescence with their views. And yet (to say nothing of the Contagious Diseases Acts) the measure of Mr. Bruce has for its object one of the most urgent and beneficent reforms imaginable—the reduction of shops for the retail of intoxicating liquors to the number at which they cease to be a temptation and only meet a necessity. The Council of the Society for Organising Charity and Repressing Mendicity is about to petition Parliament in support of that object, and solicits the co-operation of the local clergy and guardians of every district. Are we wrong in assuming that the Society may also count upon the hearty assistance of the local medical men, in its endeavour to cut at the root of an evil whose various deplorable consequences come more within the cognisance of our own profession than of any other?

THE BATTLE-FIELDS AND AMBULANCES.

ON the afternoon of Friday, the 21st inst., Surgeon-Major Dr. Mouat, of her Majesty's Bengal army, delivered an interesting lecture at the Royal United Service Institution. The subject embraced an account of the various incidents and noteworthy objects encountered by Dr. Mouat during his recent visit to some of the battle-fields and ambulances of the North of France. The lecture was, doubtless, designedly made of a popular and discursive character; but the lecturer managed to throw together a large number of observations bearing upon the medical, military, political, and social aspects of the late Prussian occupation of France. He especially described the condition of the ambulances and the nursing organisation at Amiens and St. Quentin, and alluded in highly favourable terms to the English ambulances and the benevolent character of the work that had been done by people from this country working under, and with the assistance of funds for, the Society for Aid to the Sick and Wounded.

THE TREATMENT OF LEPROSY.

THE *Jamaica Guardian* of the 28th of February makes us acquainted with the cause of the delay in dispatching Dr. Gavin Milroy to investigate Dr. Beauperthuy's treatment of leprosy. A despatch of Lord Kimberley informs the Governor of Jamaica that it is proposed to send out a gentleman from England—whose remuneration would be five

guineas a day, with expenses, the appointment being for six months at first—to conduct the inquiry; and that it is expected that the colonies in which leprosy exists will bear the expense of the inquiry in approximate proportion to their revenues. The despatch concludes by asking whether the colony will bear its share of the expenditure necessary to the proper conduct of the investigation proposed. The answer is not given. The same paper, however, prints a letter from the Foreign Office to the President of the College of Physicians, in which the latter is informed of the steps which have been taken to further the inquiry by settling pecuniary matters; and a suggestion is made that the actual inquiry should be postponed for a few months till it is known whether the interested colonies will "pay the piper"—the Cape, Mauritius, and Ceylon standing on the top of the list. Dr. Beauperthuy is going to British Guiana to carry out his plan of treatment there. We have already given reasons for thinking that it only ensures temporary relief. But we are anxious for further facts.

ARTIFICIAL FORMATION OF CONINE.

EVER since the year 1828, when Wöhler transformed cyanate of ammonia into urea, chemists have looked upon the building up of complex organic compounds from their ultimate elements as an achievement which the chemistry of the future would accomplish. In modern times, alcohol, glycerine, sugar of gelatine, and many other organic compounds of various degrees of complexity have been constructed, and chemists are gradually adding to them.

Liebig's *Annalen* for March gives an account of the synthesis of conine, the active principle of hemlock (*Conium maculatum*), which thus becomes the first natural alkaloid artificially produced. The formula of conine is $C_8H_{15}N$. The method by which it was built up was by the action of ammonia on butyric aldehyde—

$$NH_3 + 2C_4H_8O = 2H_2O + C_8H_{15}N.$$

The discovery was made by Hugo Schiff.

From the author's account it does not appear that the *complete* identity of the artificially prepared alkaloid with the natural product has been very clearly established. The artificial product is, however, highly poisonous, like the natural one.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

A VERY full meeting of this Society was brought together on Tuesday evening by Mr. Hutchinson's paper describing cases in which it was alleged chancres had been produced by vaccination from a child that was the subject of inherited syphilis so obscurely manifested as to escape the observation of the operator. After some remarks by Mr. Henry Lee, Mr. de Méric, and other speakers, Mr. Simon made a speech of half an hour's duration, in which he insisted upon the importance of taking neither blood nor inflammatory products from the vaccinifer. It was then proposed and carried that the debate should stand adjourned to the next meeting of the Society.

INDIAN MEDICAL SERVICE.

THE announcement of the India Office that it will hold no examinations for the Indian Medical Service has, as our readers may readily understand, been a cause of sore disappointment to many young men; but what they may not understand is the fact that the course pursued by the Indian Government in this matter is peculiarly harsh, if not unjust, in the case of gentlemen, natives of India, who have left their country on the strength of assurances that they are now doomed to discover will not be fulfilled. These gentlemen have made considerable sacrifices; they have undergone separation from their homes and friends, and undertaken a long voyage, for the purpose of embarking upon a course of life which they are unable to follow out, after having gone through the labour and incurred the pecuniary outlay necessary in preparing for it.

We commend these facts to the serious attention of the Government. It might surely be possible to open the gate of admission to the service to these gentlemen, many of whom have sacrificed social and official positions in India in order to study medicine in England. Why should not these be retained as an unpaid reserve, with the understanding that vacancies, as they occurred, should be filled up from their ranks?

MEDICAL CERTIFICATES IN LUNACY.

IN his report to the Committee of Visitors of the Surrey County Asylum at Brookwood for the year 1870, Dr. Brushfield, the medical superintendent, adverts to the inconvenience arising from the defective nature of the certificates accompanying patients on admission. He points out that the particulars as to duration and cause of attack, &c., which are now required to be embodied in the "statement" to be filled up by the relieving officer, ought properly to be supplied in the certificate of the medical officer. Under the present legal form the replies to these important questions are often so erroneous as to be calculated to mislead in the subsequent care of the case, and it not unfrequently happens that they are contradictory to the facts contained in the medical certificate. Dr. Brushfield therefore urges that a new form of medical certificate should be authorised, which should include all particulars of a medical nature requisite for the medical officers of the asylum to be supplied with, and that it should show these details in a tabular form under the necessary headings in order that medical men might know exactly the nature of the information which they should endeavour to give.

TENTS FOR CONVALESCENTS AT THE SMALL-POX HOSPITALS.

WE rejoice to find that the experiment of using military tents for patients convalescent from small-pox is about to be tried at Stockwell. The energetic committee of that hospital, under the chairmanship of Mr. Shaw Stewart, have obtained from the Government ten tents, each of which it is thought will afford accommodation for twelve patients. It is to be regretted that the nature of the ground does not admit of the erection of a larger hospital marquée, for on inspection we fear that the smaller ones will not be large enough for the proposed number. We hear that there are proposals before the managers to take fresh sites for the purpose of erecting these larger tents, several having been set up at Ascot and found to answer admirably.

THE PENZANCE DISPENSARY AND INFECTION WARDS.

IT has been resolved to build a small infirmary in connexion with the Penzance Dispensary, and at the annual meeting of the subscribers the propriety of adding wards for the treatment of contagious diseases was discussed. The chairman stated that several cases had arisen, and Dr. Buchanan had impressed upon the Sanitary Committee of the Local Board the necessity of having a ward for the reception of cases brought in from the shipping, &c. Dr. Buchanan strongly recommended that the infectious wards should form part of the infirmary buildings, due precautions being taken to secure perfect isolation. We regret to observe that an amendment was carried, "That it is not

in the interest of the dispensary and infirmary that any infectious ward should be established in connexion with it." Perhaps the guardians may be persuaded to make the necessary provision.

PROFESSOR OPPOLZER.

WE beg to draw the attention of our readers to our Vienna correspondent's biographical sketch of this eminent physician, whose death leaves a distinct blank not only in Austrian but in European and Transatlantic medicine. Not a few of our most promising practitioners studied under Oppolzer; and they will be able to appreciate the more delicate touches of our correspondent's sketch, if not to heighten them from their own recollections. The Vienna school, in the retirement of Skoda and the decease of Oppolzer, has sustained a loss which it will task all the energies of the undoubtedly able successors of these physicians to repair.

CARBOLIC ACID AS A POISON.

THREE deaths from carbolic acid, accidentally taken in mistake for cough medicine, are reported from Manchester. They occurred in the Union workhouse on Saturday last. It is strange that carbolic acid should have become so popular a remedy without more attention having been directed to the fact of its being a most virulent poison. Certainly, greater discrimination and care than have heretofore been shown are urgently called for in the employment of so potent an agent as carbolic acid has proved itself to be.

BOILING A LUNATIC.

THE "order of the bath" recently enjoined by the Lunacy Board on all superintendents of lunatic asylums, has failed to reach Mr. William Cooper, keeper in the Surrey County Asylum at Wandsworth, who actually put an inmate, aged sixty-five years, into a bath, and, the cock being behind him, turned it on with almost boiling water. The consequence to the lunatic was, of course, "extensive scalds on the back, left arm, and ankles," and "death by bronchitis, due to the scalds." The man said he "had acted thoughtlessly." Mr. Ingham, we are glad to learn, fully committed him for trial.

MR. RUSSELL GURNEY'S Bill for the appointment of Public Prosecutors passed the second reading on Wednesday night. Some opposition was made to it; but the speeches in its support by Sir John Pakington, the Attorney-General (who pointed out that we were the only civilised country in the world without a public prosecutor), and the Home Secretary, materially assisted in forwarding a Bill from which no interests have more to gain than those of the public health, physical and moral.

THE Worcester guardians have issued instructions forbidding the giving of medical orders by the aged pauper who has been in the habit of doing this duty for the relieving officers. A motion was made to rescind a resolution to appeal to the Poor-law Board in a case of supposed neglect on the part of Dr. Woodward, one of the district medical officers. The motion failed, and we hope that the matter will be thoroughly sifted by the Poor-law Board.

THE subject for the Collegial Triennial prize of the Royal College of Surgeons, to be awarded in 1872, is "The Structure and Functions of the Medulla Oblongata, including the connexions of the Central Nerve-roots." The subject for the Jacksonian prize for the same year is "The Diseases of the Nose, including the Sinuses connected with it, and their Treatment."

THE Adulteration of Food, Drugs, &c., Bill, which was down for Committee on Wednesday last, has been postponed until the 23rd of May. Sir Charles Adderley has given notice of his intention to oppose the motion for going into Committee.

OUT-PATIENT ADMINISTRATION REFORM.

ON Thursday last a meeting was held at the rooms of the Medico-Chirurgical Society, to consider the question of out-patient reform. Sir William Fergusson, Bart., F.R.S., took the chair. There were upwards of sixty gentlemen present and amongst others, Mr. Spencer Wells, Mr. T. Holmes, Dr. Anstie, Dr. Morell Mackenzie, Dr. Hawksley, Dr. Buzzard, Dr. Pollock, Dr. Percy Leslie, Dr. Ross, &c.

Sir WILLIAM FERGUSSON stated that the present meeting had been convened to receive the Report of a Committee appointed at a similar meeting which was held on the 24th of March, 1870, to investigate the working of the out-patient departments as at present constituted, and to draw up suggestions for reform. That Committee consisted of forty-five persons, and had been most industriously engaged. Sub-committees had presented four separate reports on general hospitals, special hospitals, dispensaries, and the Poor-law medical service, in which were embodied a large mass of interesting information, and some valuable suggestions for improvement. The subject was one of the deepest importance, not only to the profession, but to all classes. The profession were ready to give their time and skill, but other resources were required, and the rich and benevolent were called upon to supply them. In reforming the abuses difficulties might be placed in our way by others, but he believed the step taken last year was one in advance, and he hoped that we should continue in the course of reform by sustaining the Committee, and by affording them such pecuniary assistance as was required.

Dr. HAWKSLEY moved "That an improved administration of Poor-law medical relief, in accordance with the Metropolitan Poor Act of 1867, is essential to the reform of the out-patient administration of the metropolis." He stated that many instances of flagrant abuse of charity had come under his personal notice; that it was not an uncommon circumstance for physicians to be sent for in consultation upon persons who had been out-patients at the hospitals, and that it was quite time some attempt was made to put a check upon these abuses. The foundation of any improvement must be a proper provision for the really destitute, who ought to be provided for under the Poor Law. The Act of Mr. Hardy for the establishment of dispensaries had been much mutilated, and had not been properly carried out. In the language of the report of the sub-committee on the Poor-law service, the Poor-law Board should insist upon the fulfilment of that Act, and should issue a series of instructions to the guardians or managers, with the object of securing a uniform and efficient administration of the dispensary system; the whole subject to be placed under a special medical department at the Poor-law Board.

The resolution was seconded by Dr. ROGERS, who stated that he had examined the public reports of the metropolitan hospitals and dispensaries, and found that the number of out-patients (cases of sickness) attended in one year was 1,000,648; and from the Poor-law returns there had been 206,590 more attended by the Poor-law medical officers. The effect of this huge amount of charity was to do the work, and lessen the importance, of the Poor-law medical officers, and to diminish their income; whilst at the same time the work was not by any means so well done as it ought to be at the hospitals, the consequence of which was an increase in the expenditure from the poor-rates. By comparing one or two districts these facts came out most clearly. In the Strand Union, in a population of 42,898, there were in 1866 three medical officers. According to a return made to Parliament, one had, on January 7th, 43 patients, another 24, another 9; whilst on July 7th, one had 18 patients, another 21, and the third only 1. The average number attended annually by all three was only

600. The duty of the Poor-law medical officers was done by charities. Thus Gerrard-street Dispensary had 10,632 cases; Stanhope-street had 4000 cases, besides 800 who were attended at their own homes; and in addition to these there was the out-patient department of King's College Hospital, with 39,704 cases. In the City of London Union, with a population of 113,290, matters were still worse. There were ten Poor-law medical officers, who attended 7828 cases in the year, the large majority being in the Eastern division of the union. In one division the post of medical officer was at that time little better than a sinecure. But the Poor-law service was here supplemented by—

	Cases.
The City Dispensary, Watling-street, with... ...	17,663
City of London and East London Dispensary, with	14,000
Farringdon-street Dispensary, with	16,000
Metropolitan Dispensary, Fore-street, with ...	12,000
Royal General Dispensary, with	15,348
Out-patient Department, St. Bartholomew's Hosp.	120,000
Out-patient Department, Metropolitan Free Hosp.	83,903
Total	278,914

So that the whole population might go two and a half times a year for free assistance, and the wonder was that anyone was left to pay. But it was instructive to turn to Whitechapel, where a Poor-law dispensary had been in operation for thirty years. Here there were four medical officers, and, in a population of 78,187, they attended 15,372 patients (cases) in the year. In this district there is only one dispensary and the London Hospital, but it was to be noted that there had been comparatively less increase of expenditure on relief than in any other district in the metropolis. But the most important comparison was to be made with the South Dublin Union, where, in a population of 145,665, no less than 44,189 patients had been attended at the Poor-law dispensaries, with the effect of almost putting an end to the abuses of free out-patient relief at hospitals. The Poor-law medical service in Dublin cost the public £9693 a year. If the medical profession of London were paid for the work after a similar rate, they would be in the receipt of £88,887 a year; and as they only got £37,024, it became clear that by the gratuitous system of out-patient relief at hospitals £51,836 a year was taken out of the pockets of those members of the profession who engaged in the Poor-law service, and the work, like most unremunerated work, was unsatisfactory to all parties.

The next resolution was proposed by Mr. E. HART and seconded by Mr. CURGENVEN:—"That, in furtherance of the above resolution, and in order to limit the pauperising tendency of the present system of gratuitous relief at hospitals and dispensaries, all free dispensaries should be under the control of the Poor-law authorities, so that a proper system of inquiry may be instituted previous to the administration of gratuitous medical relief."

Dr. FORD ANDERSON then proposed—"That, in order to encourage a feeling of self-respect among the working classes, and that they may secure for themselves during health the necessary medical attendance in sickness, it is desirable that the system of provident dispensaries should be largely extended, both by the conversion of the present free dispensaries, and by the foundation of others." He said that cheap physic destroyed self-respect and lowered the rate of wages, and he advocated provident dispensaries as the true remedy. There was a tendency to visit new institutions for errors and defects which would be passed over and condoned in older ones. One thing was quite certain—viz., that the abuse of people going to a charity in broughams could not apply to any provident dispensary. Practitioners did not suffer from the proximity of a provident dispensary as they did from the introduction of a free hospital or dispensary, for there was an immense number of persons who would go for advice where there was nothing to pay for it. But why was it that out of seventy dispensaries in the metropolis there were only ten conducted on the provident principle? He believed it was to be explained by local jealousies and ignorance. But the great cause of want of success was indiscriminate charity at the free dispensaries. It was all but hopeless to induce working men to become members of provident dispensaries whilst there were so many institutions for absolutely free advice.

The resolution was seconded by Mr. SPENCER WELLS, who said that the profession could abolish free dispensaries if it chose to do so. He could not conceive the existence of any large number of persons who, not being destitute and entitled to medical relief at the public Poor-law dispensaries, could not afford to pay a penny or twopence per week to a provident dispensary. The principle of paying when well was one altogether different from that of cheap physic, and he took that opportunity of protesting against the proposal made in one of the sub-committee's reports that small payments should be exacted from the out-patients of the hospitals. He hoped that steps would be taken to carry out the resolutions adopted by the committee on this point.

Mr. HARDY, as one of the officers of the Marylebone Provident Dispensary, said that the great difficulty they had to contend with was the out-patient department of the Middlesex Hospital; and, in his opinion, the reform of that department ought to precede the attempt to introduce provident dispensaries. He said there was another difficulty arising from the prejudices of the benevolent, who preferred to give their money to free institutions.

Dr. MORELL MACKENZIE seconded the amendment, and thought that the admission of patients to provident dispensaries by payment was equally objectionable as their admission to hospitals on the same terms.

Dr. FORD ANDERSON explained that the admission by a payment of 10s. was only temporary, and that he hoped it would not be continued in well established dispensaries. The law should be made absolute that every person should be admitted in a state of health.

Dr. STALLARD thought it unwise to defer the change proposed until the out-patient department of hospitals was reformed. Many of those institutions were most difficult to move. It was hopeless to expect reform at the Royal Hospitals. Moreover, some consideration must be paid to the requirements of medical teaching. The Committee sought to make use of the existing institutions in favour of a plan calculated to raise the self-respect and independence of the lower classes. With respect to the subscribers, it was to be expected that they would often prefer to give to the free institutions. That was in accordance with tradition and public opinion, but the hope of the Committee was to alter that feeling by pointing out the superior benevolence of the provident plan.

The amendment was lost, and the motion carried, with only one dissentient.

Mr. T. HOLMES then moved: "That, for the reasons given in the preceding resolution, and in order to improve the clinical teaching of the out-patient department of the general and special hospitals, it is very desirable that the present unrestricted system of gratuitous relief at those institutions be curtailed, partly by the selection of cases possessing special clinical interest, and partly by the exclusion of those who on social grounds are not entitled to gratuitous medical advice." He said that he moved the resolution with a reservation that the word "partly" applied to every portion of it. He sympathised with those who had said that the reforms ought to extend at once and thoroughly into the out-patient departments of the hospitals, by diminishing the numbers, so that every member of the staff could honestly attend to the cases he undertook to examine and prescribe for. He denied altogether that out-patients obtained the attention and skill of the heads of the profession, or that they received anything which ought to be dignified as charity. In London a system had grown up which ought not to be cloaked. It was a deception on the poor as well as on the public. He certainly looked to the time, which might, however, be remote, when every person coming to a hospital shall be secured that reasonable amount of care to which he is entitled, on account of the sacrifice of time which the patient had made to obtain it.

Dr. ANSTIE seconded the motion. He remarked that out-patient work was more teasing, disappointing, and exhausting than the study of some intricate German problem of physiology, and that the study of interesting cases was rendered impossible by the crowd of cases which did not require medicine at all. As to teaching, he considered the lessons of the out-patient room, as now conducted, were most mischievous. Teaching ought to be slow and careful and confined to simple cases. But the student was taught to admire rapidity of diagnosis in the out-patient room.

The motion was carried unanimously.

DR. STALLARD moved, "That the practice of receiving payments for medicine or medical advice from the out-patients of hospitals is undesirable." He said this was the only stumbling-block on which the Committee had disagreed, but he hoped that the meeting would finally set their mark against the principle of exacting payments from patients. The proposal was a very fascinating one to the managers of needy hospitals, who thought that all the expense of the out-patients would be met by the payment of a shilling per case. But it was hopeless to suppose that we could establish provident dispensaries, requiring the subscription of money during health, in face of payments which could be made when the assistance was actually required. Nor was it possible to blink the fact that such hospitals would be in direct antagonism with the general practitioners in the neighbourhood. Let there be no mixing up of charity and right derived from payment. Let the profession give generously, or withhold their charity.

DR. WARWICK, of Richmond, seconded the resolution, and it was supported by Dr. Ross and others, and passed unanimously.

DR. POLLOCK proposed, "That the governors of hospitals ought in all cases to provide some honorarium for the staff of the out-patient department." He observed that the labourer was worthy of his hire, and as an out-patient department would always form a necessary part of hospital administration and clinical instruction, it was most important to place the best men in charge of it. An honorarium would often enable men of high professional attainments, but of small means, to take hospital appointments, and become teachers.

The motion was seconded by Mr. TREVAN, and passed unanimously.

DR. BUZZARD then proposed, and DR. ROGERS seconded, "That a committee be appointed to memorialise the President of the Poor-law Board, the Governors of the various Metropolitan Medical Charities, and the Society for Organising Charitable Relief, to assist in carrying the foregoing resolutions into effect, and to take such other steps as they may think requisite."

Being carried unanimously, the following names were submitted to the meeting, with power to add to their number:—Sir W. Fergusson, Dr. Burrows, Mr. Bowman, Dr. Stallard, Dr. Meadows, Dr. Rogers, Dr. Guy, Dr. Ford Anderson, Mr. J. Hutchinson, Dr. Pollock, Dr. Clapton, Mr. Curgenven, Mr. Holmes, Dr. Heywood Smith, Dr. Stewart, Dr. Hawksley, Mr. E. Hart, Mr. Gascoyen, Mr. Spencer Wells, Dr. Buzzard, Mr. Fairlie Clarke.

A vote of thanks was passed by acclamation to the Medical and Chirurgical Society for the use of their room, and to Sir William Fergusson for his conduct in the chair.

THE VACCINATION COMMITTEE.

ON Friday, the 21st inst., Mr. Simon gave some interesting illustrations of the working of the present vaccination law. Leeds has a population of 118,000, and during the year ending April 1st, 1870, there were born 5500 children. Of these 85 per cent. had been registered as vaccinated, 12½ per cent. had died, 2 per cent. had migrated before vaccination; a small number had been postponed on account of ill-health; and out of the 5500 children only two were unaccounted for. In Wigan, with a population of 44,000, the births in two years, from October, 1868, to September, 1870, were 3485. Of those 88¼ per cent. had been duly vaccinated, 9 and a fraction per cent. had died before vaccination, 2 per cent. had migrated, 2 per cent. were postponed on account of ill-health, and not one was unaccounted for. In Exeter, with a population of 33,000, there were 1084 children born: 81 per cent. were vaccinated, 11 and a fraction per cent. died before vaccination, 6 per cent. had migrated, 1½ per cent. had been postponed, and none were unaccounted for. In the whole of the Wigan Union nearly 11,000 births were registered in the two years ending September 30th, 1870, the whole of which, excluding deaths and removals, were registered as vaccinated by March, 1871, except 114. In an examination recently made of children in the schools in the borough of Wigan by the registrar there were found vaccinated 6024, and unvaccinated, 52 children; 27 of the 52 unvaccinated had been born out of the registrar's sub-district. Certificates of the subsequent vaccination of 46 out of the 52 unvaccinated have since been received.

Mr. Fry, chief legal adviser at the Poor-law Board, made some suggestions for improving the Vaccination Act. He proposed that the whole of the duties connected with vaccination shall be imposed upon the guardians, the registrar simply submitting a list of defaulters at short intervals. He proposed to give the magistrate the power of inflicting the penalty whether the child be brought before him or not, provided he is satisfied that vaccination has been neglected; but that the offender should escape by making oath that he had a conscientious objection to his being vaccinated. He proposed that all certificates of vaccination should be sent direct to the guardians, and that all medical men should be compelled to send them. He thought the form for postponing vaccination needed amendment. He admitted that no active steps had been taken by the Poor-law Board to secure a uniform administration of the law; and, in answer to Mr. W. H. Smith, he admitted that there were three medical officers who were either engaged or interested in vaccination, all of whom were appointed by different bodies—viz., the medical officer of health, the Poor-law medical officer, and the public vaccinator,—paid from different funds, and who had no direct relation or intercommunication on the subject. This was not satisfactory. He saw no objection to paying a portion or even the whole of the expenses of vaccination from the Consolidated Fund.

EPIDEMIC CHOLERA.

Persia, Turkey-in-Asia, and Arabia.—News from Teheran and Bagdad, at the close of March, states that cholera then was still prevalent in Bushire, and that the disease had broken out at Bussorah, at Kurnah, near the junction of the Tigris with the Euphrates, and in the vicinity of Sheik-el-Shuyukh, on the Euphrates. The outbreak at Bushire commenced at the beginning of March or the termination of February, and about the same time small-pox also began to spread in the town.

During December, 1870, the epidemic was prevalent at Bendar Abbas; but the outbreak is stated to have come to an end before the Persian pilgrims commenced their journey to Mecca.

Cholera would appear to have ceased its ravages in Teheran at the close of November. The disease broke out in that city at the beginning of October, 1870. During the first two weeks of the outbreak from seven to ten deaths from it were reported daily. Further returns were as follows: March, 15th, 17 deaths; 16th, 32; 17th, 46; 18th, 47; 19th, 80; 20th, 82; 21st, 82; 22nd, 80; 23rd, 76; 24th, 56; 25th, 44; 26th, 37; 27th, 35; 28th, 34; 29th, 41; 30th, 50; 31st, 45. Current report stated the number of deaths on the 20th to range from 130 to 140, and on the 21st from 140 to 180; but the official reports gave the figures in the above list. From the 1st to the 10th of November the number of deaths fluctuated from thirty to forty a day. After the last-named date the mortality steadily declined; and no death from the disease, indeed no case, was reported after the 1st of December.

The epidemic was very virulent. It first appeared in the neighbourhood of the principal gates of the city, but rapidly extended to every quarter, and invaded even the citadel and the palace. The outbreak was attributed on the spot to the exhumation of bodies preceding the annual pilgrimage to Kerbela. Not less than 300 bodies were exhumed at Teheran; the greater number, it is asserted, being the bodies of persons who had died from cholera in the outbreak of the previous autumn and winter. It has been remarked, also, that for several years the recurring outbreaks of cholera in Teheran have almost invariably followed the annual exhumation of corpses for transportation to Kerbela.

The Hedjaz.—The pilgrimage to Mecca this year has not been attended with any outbreak of epidemic disease. The number of pilgrims assembled during the four days of the religious rites is estimated at 100,000, and among these but forty-eight deaths occurred, two from accident. The

hygienic arrangements of the camps and city are stated to have been carried out very efficiently under the control of the Turkish Medical Commission, which now meets annually to regulate all matters relating to public health in the city and its vicinity during the continuance of the pilgrimage.

Madagascar.—We learn indirectly from Aden, under date February 28th, that cholera has been making great ravages in Madagascar.

St. Petersburg.—The following are the returns from St. Petersburg for April 4th and 5th, together with summary from the commencement of the epidemic in that city:—

1871.	Cases under Treatment.	New Cases.	Recoveries.	Deaths.
April 4th	909 ...	66 ...	57 ...	35
„ 5th	883 ...	70 ...	56 ...	29

Total from first appearance of epidemic from August 29th, 1870, to April 6th, 1871:—Cases, 3910; recoveries, 1459; deaths, 1561.

THE SMALL-POX EPIDEMIC.

PROGRESS OF THE EPIDEMIC.

THERE is no evidence whatever of any abatement in the small-pox epidemic in the metropolis. The number of fresh cases reported by the Poor-law medical officers was 652 in the week ending April 15th; and, although the returns are not complete for last week, there will be no diminution. The disease is on the increase in St. Pancras, the number of fresh cases being nearly double what they were. There is also an increase in Islington, Hackney, and St. Saviour's, Southwark. There is a decline in Wandsworth and Clapham. All the small-pox hospitals are full, several of them inconveniently so. Hampstead has 40 cases over the number permitted by the Poor-law Board, and, to make matters worse, they are nearly all acute cases, the convalescents having been removed to Islington.

According to the Registrar-General's Return, the fatal cases of small-pox in London, which in the three previous weeks had been 192, 214, and 265, further rose last week to 276, the highest weekly number that has occurred during the present epidemic. Allowing for the interruption in registration caused by Good Friday and the following Easter holidays, it is evident that the deaths from small-pox have shown a steady increase in the past four weeks. The 276 returned last week were considerably more than double the highest weekly number registered in London during the several epidemics which prevailed in the thirty-one years 1840-70. In nine permanent and temporary special hospitals for this disease 119 deaths were recorded last week, of which 44, 29, and 25 occurred respectively in the institutions at Hampstead, Stockwell, and Homerton. After distributing, so far as is practicable, these deaths in hospital among the districts from which the patients were admitted, it appears that 31 deaths from small-pox last week belonged to the West group of districts, 64 to the North, 25 to the Central, 57 to the East, and 99 to the South. The fatal cases showed a decline in the North districts, while they were considerably more numerous in the Central and South districts. The fatality from the disease had increased last week in Holborn, Battersea, and Southwark. It is worthy of remark that 5 of the fatal cases recorded in the Small-pox Hospital at Islington were of inmates admitted from the suburban districts—Edgware, Stanmore, Willesden, and Hendon.

ANOTHER SHIP FOR SMALL-POX.

The Lords of the Admiralty have written to the Metropolitan Asylums Board, offering them the use of the ship *Rhine*, of 1080 tons, now lying at Sheerness, on condition that the managers undertake the expense of moving and fitting her up, of disinfecting her thoroughly when done with, and of returning her at the end of six months. The offer will be submitted to the managers of the Metropolitan Asylums this day (Saturday). But it is doubtful if they will accept it. The ship has only two decks, and would not accommodate more than seventy or eighty patients, whilst the expense of bringing her from Sheerness and fitting her up would be considerable. It would also be difficult to provide a special staff for so small a number of patients.

SMALL-POX IN GLASGOW.

We rejoice to note that there is no increase in the number of cases of small-pox in Glasgow. There are at present 47 vaccinated and 58 unvaccinated patients in the public hospitals, and there are no cases awaiting removal. There were 9 deaths, being an increase of 4 on the previous week. In his weekly report Dr. Gairdner observes:—"It may fairly be presumed that the constant care taken to remove to hospital all the cases in poor localities, and the house-to-house visitation of the localities, with a view to recommend and practise vaccination, have been largely effective in restraining the epidemic hitherto, and preventing it from assuming the proportions of the London and Liverpool epidemics. Since March 8th 120 separate localities have been visited in consequence of small-pox cases having been reported. These have all been subjected to house-to-house visitation with the above objects, and in only one instance, as is known to us, has the disease reappeared in the tenement in which a case has been so reported. The work at the vaccination station continues to be conducted with energy, 712 individuals having been examined and 126 vaccinated. Since last report we are not in possession of the whole facts as regards the deaths from small-pox in private practice, but from inquiries made there is reason to presume that by far the greater number, if not the whole of them, have been in unvaccinated persons."

Correspondence.

"Audi alteram partem."

BICHLORIDE OF METHYLENE (CHLOROMETHYL) IN GENERAL SURGERY.

To the Editor of THE LANCET.

SIR,—In your number of to-day there are some remarks on "Modern Anæsthetics," from which a reader might infer that, while bichloride of methylene may be usefully employed in operations on the eyes, it is not an agent "of very extensive utility," nor likely to supersede the use of chloroform in general surgery.

I believe the writer has thus expressed what is commonly believed to be true, as I have seen and heard several statements to the effect that, like nitrous oxide gas, the bichloride of methylene—or chloromethyl, as it may be more conveniently called—is only to be used for short operations, and that it cannot be safely administered for more than one or two minutes. But as my experience would show that this commonly expressed opinion is the very reverse of the truth, it seems to be my duty to make known what I have seen of the use of chloromethyl in general surgery.

The first surgical operation in which chloromethyl was ever used was a case of ovariotomy, which I performed in October, 1867. It was administered by Dr. Richardson himself, and in his report to the British Association in 1868 he says:—"After subjecting myself to the action of the vapour to the production of perfect insensibility, I ventured to administer it for surgical purposes on the 15th of October last. The sleep produced was of the simplest and gentlest character, and the operation, performed by Mr. Spencer Wells, which lasted thirty-five minutes, was quite painless."

This was my 229th case of ovariotomy. I have now done 417, and, with the exception of about 10, where, for some reason or other, chloroform was used, chloromethyl was the anæsthetic employed in every case, about 180 in number. In some 25 other cases of gastrotomy, and in more than 50 operations of more or less severity—such as herniotomy, amputation of the breast, removal of mammary or other tumours or of hæmorrhoids, and plastic operations for the cure of vaginal fistula or ruptured perineum—chloromethyl has been administered for me either by Dr. Richardson himself or by my colleagues, Dr. Junker and Dr. Day. In very few of these operations was the condition of insensibility to pain maintained for less than five minutes. In a few it was kept up from forty-five minutes to an hour or more, and I should think the average would be about fif-

teen minutes. Yet I have never been at all uneasy in any one of these cases, more than 250 in number, either during the administration of the anæsthetic or from any subsequent ill-effects fairly referable to it. Whereas, with chloroform I never felt quite at ease; and, although I never lost a patient during operation, I have three times had to resort to artificial respiration, and I have very often seen patients suffer so much from chloroform-vomiting for many hours after operation, that the result has been imperilled, and in some cases a fatal result has been in a great measure due to the vomiting. It is quite true that chloromethyl has also "the disadvantage of causing nausea and occasional sickness;" but in my experience this is almost the rule with chloroform, whereas with chloromethyl it is certainly exceptional.

When I add that between April, 1870, and March, 1871, I had thirty-two successive cases of ovariotomy in private practice without one death, every patient having recovered, it must be admitted (as anæsthesia was complete in every case, not one patient having been conscious at any stage of the operation) that the anæsthetic employed is a good one. In some cases less than two drachms was used, and very rarely more than six drachms. Dr. Junker's apparatus was generally employed, and Mr. Krohne tells me that many practitioners on the continent, in America, and in different parts of our own country, who have ordered it from him after seeing it in my practice, have used it without difficulty, and have been well pleased with the results.

I am, Sir, yours obediently,

Upper Grosvenor-street, April 22nd, 1871. T. SPENCER WELLS.

THE MEDICAL DEGREE OF ST. ANDREWS.

To the Editor of THE LANCET.

SIR,—As a paragraph in the last impression of THE LANCET, entitled "The Medical Degree of St. Andrews University," contains imputations which are at once unfounded and offensive, I must ask you to permit me to make the following statement:—

1. There is no Medical School at this University.
2. The University is in no sense of the term "*needy*."
3. Candidates for medical degrees are only admitted to graduation after satisfying the medical examiners of the sufficiency of their professional knowledge.
4. The Examining Board is composed of seven examiners, four of whom are annually appointed by the highest Court of the University, as men of distinction in the respective departments on which they examine; the remaining three are University Professors.
5. The Medical Examiners have no pecuniary interest whatever in the numbers who graduate.
6. The action which has resulted in a petition by the University Court to Her Majesty in Council to extend the power of the University to grant medical degrees, was taken in the first instance, not by the University authorities, but by an influential association of medical graduates of the University. The senate of the University has purposely refrained from action in this matter, believing it right that the question should be decided on public grounds alone.

Such being a brief statement of facts, I request their insertion in contradiction of the paragraph alluded to, the writer of which should surely, in fair play, if not in common courtesy, have informed himself correctly before he essayed to enlighten—or, as the above statement shows—to misinform your readers.

I remain, yours truly,

OSWALD HOME BELL,
Professor of Medicine, University of St. Andrews.

St. Andrews, April 17th, 1871.

To the Editor of THE LANCET.

SIR,—The annotation in THE LANCET of the 15th inst., under the above heading, will convey to many such an erroneous notion of the facts of the case that I beg of you space for comment.

The amended regulations do *not*, as is suggested by the annotation, "entrust" the University of St. Andrews "with the power of giving the highest medical title to all who have been five years in practice," but only to such as shall be certified by men of distinction to have acquired acknowledged professional position and experience, and who shall pass a strict and searching examination, lasting three days, and conducted by examiners *sans peur et sans reproche*.

The writer of the annotation admits that he is "well aware that many men in practice develop a merit that should be rewarded by a medical degree." True; but if the word "many" be represented by a number greater than ten annually, the eleventh and all the others cannot, under the present regulations, obtain the reward of their merit. THE LANCET has not been wont to defend a monopoly of this sort.

The amended regulations are conceived in no such narrow spirit. The University of St. Andrews lends no countenance to the dictum that out of the whole body of the general practitioners of the United Kingdom only ten are to be found in each year who are fit to receive the honour of a degree. Try them. If they have not kept terms at a university, learning of disease by seeing its shadow in a book, make them show instead that they have been working among the sick, learning of disease by seeing its reality in man. Test their knowledge by a wide and practical examination, and when they have proved that their "merit is real" give them their reward, be they what they may in number.

One correction more. This movement did not arise *within* the University; it came from *without*. It was the response to an appeal to the Assessor of the General Council from numerous men of eminence in their profession all over the country, who are unable to offer themselves for examination for the degree of Doctor of Medicine on account of the present arbitrary restriction to ten annually.

Thus, Sir, two of the requirements of the writer of your annotation are secured: "the merit should be real"—"the conditions clearly defined." But what shall I say for the third?—that "the examining authority should be above all suspicion of pecuniary interest." I say this, that the present examiners *are* above suspicion; that they have had no part in the promotion of the amended regulations; and that even if they were inclined to sacrifice the credit of the University and their own honour to pecuniary interest, there is behind them the Visiting Commission of the General Council of Medical Education to keep them honest; and if that should fail, there is THE LANCET.

I am, Sir, yours obediently,

LEONARD W. SEDGWICK, M.D., St. And.

Gloucester-terrace, Hyde-park, April 18th, 1871.

A NEW INSTRUMENT FOR VACCINATING.

To the Editor of THE LANCET.

SIR,—There are few medical practitioners who have not had their attention more or less directed of late to the subject of vaccination. Several means have been devised for the successful performance of the operation. When the simple puncture is not adopted, with or without a grooved lancet, the chief object in view has been to remove the epidermis so as to expose the absorbing surface of the cutis vera. This latter mode has unquestionably proved the most successful, but the difficulty has always been to accomplish it, first, *quickly* without producing unnecessary pain or bleeding (a very essential point with nervous children); and, secondly, *to limit the extent of the exposed absorbing surface*. Scratching in various ways has been generally employed, and lately blistering has been occasionally adopted.

Although for many years accustomed to vaccinate by puncture with a lancet either simple or grooved (Spratley's), I must confess to many failures. I have also seen and heard of many cases during the late panic in which arms have been inflamed to a degree that is not only unnecessary but would give a barbarous idea of an operation that need not give rise to any such distress or inconvenience. These cases have arisen in consequence of want of care in *limiting* the surface exposed to the influence of the vaccine lymph. I have, therefore, thought that if an instrument could be designed that would effect the objects in view—namely, producing an absorbing surface *quickly and painlessly*, and the *limits of which could be exactly determined*,—it would prove a desideratum. Such an instrument, which I will

endeavour to describe, has been made under my direction by Mr. Coxeter, of Grafton-street East, and from the experience I have had of it I believe it to be eminently successful.

The length and size of the instrument is about that of an ordinary pencil-case, four-fifths of which consists of a hollow ivory handle to hold capillary tubes, with the end made to screw on and off. The other end is constructed of metal, with a cap to fit over it, having a "bayonet" fastening. By twisting the cap and retracting it, a set of five needle-points eccentrically arranged, about the thirty-second of an inch in length, protrude, the centre needle being slightly the longest.

The mode of using it is as follows. Having pushed the needle-points forward as far as they will go, the thus armed end of the instrument is firmly pressed upon the skin, and at the same time a slightly rotatory motion is given to it. The result is that the epidermis is removed in rings to the extent of the superficies of the end of the instrument. Upon this absorbing surface the liquid lymph or moistened points should be gently rubbed. The size of the vesicle corresponds with the extent of the abrasion.

The instrument of course can be constructed with or without the hollow handle, and of any length desired.

I have used it in a number of cases with uniform success in my own practice. I have also tested it at a vaccine establishment, in the presence of a public vaccinator, and in no single point in the limited number at my disposal did it fail to produce a *very fine vesicle*. Notably in one of these cases, of an infant only a fortnight old, the public vaccinator took one arm, and I the other. He used a "Spratley"; I my own instrument. The result was that every point in my case presented a fine vesicle. On his side only one small vesicle resulted out of three punctures most carefully made.

I am, Sir, your obedient servant,

Hampstead, April, 1871. H. COOPER ROSE, M.D.

SUPPLEMENTARY BLADDER CONSEQUENT UPON STRICTURE.

To the Editor of THE LANCET.

SIR,—On reading the notes of the Clinical Society of London for March 24th, and your leader of April 8th, the following case comes to my recollection, and contains a peculiarity I have never seen recorded.

The case was one of all but total occlusion of the urethra from the point to its junction with the scrotum, so complete as to prevent even the passage of the smallest stilette. All the water passed by six or seven openings in the scrotum and perineum, and this state had existed for ten months, not one drop having passed through the first four inches of the urethra, and the urethra felt under the finger like a solid cord.

The patient was a fat Eurasian, about forty-six years of age, of leuco-phlegmatic temperament; had been all his life in India; married. He had had gonorrhœa in early life, but a fall stride-legs of the bar of a ladder from a height was the cause of the inflammation that led to the present condition of his perineum.

On examination the scrotum was found excessively puckered, the fistulæ lined with a natural-looking mucous membrane, and the course of the urethra behind the anterior abnormal opening excessively hard, almost cartilaginous, the tissues being matted, as is usual in that part, from repeated inflammation. The irritation from the condition of the parts was necessarily very great, the urine dribbling from all the openings, and the patient suffering from intermittent fever on any access of irritation.

After persevering twice a week for more than three months with the greatest care, really *making* my way down the penis, I succeeded in dilating the anterior part of the canal, down to the first fistula, to the size of a No. 10 silver catheter, constantly interrupted by attacks of intermittent fever, which towards the end of the time I completely prevented by a full dose of quinine and opium given twenty minutes before the operation.

Having succeeded so far, I found that several other strictures existed both before and behind the bulb, and that the urethra was tortuous and in *ridges*; and although water could pass, I could not succeed in getting either a sound, director, or elastic bougie into the bladder. And here, I believe, is a case which proves that external urethrotomy is sometimes *absolutely necessary*.

With the assistance of Dr. Maunsell I gave chloroform, and placed the patient in the position for lithotomy. With the scrotum well held forwards, and my finger in the rectum, I cut in the mesial line, a little ahead of where the catheter was. It was exceedingly difficult to feel the point of the instrument among the hardened tissues, but after a few touches of the knife and finger I opened a large cyst containing urine, which gave me a free opening into the anterior part of the prostate, and I could pass a director along my finger into the bladder. With a little force and some dissection backwards towards the point of the catheter, I found it, passed it on, and tied it in. All did well under full doses of quinine, opium, and diluents, and the fistulæ ultimately, with much trouble, all healed.

The singularity of the case, however, consists in the fact that, after the patient has emptied the bladder he does not feel comfortable till, by pressing on the inner side of the left tuberosity of the ischium, he gets rid of two or three ounces more urine. A sac must have formed anterior to the prostate from the dilated urethra, which had not contracted eighteen months after the operation, although the whole canal was patent. The patient still weekly uses a No. 10 bougie.

I am, Sir, your obedient servant,

Aberdeen, April 11th, 1871. A. VANS BEST.

BONE-SETTING.

To the Editor of THE LANCET.

SIR,—I beg to forward the following cases as results of the late Mr. Hutton's treatment, and would suggest that we should at least take great care to discriminate before endeavouring to put in force the manipulations Dr. Hood has evidently been at considerable trouble to acquire for the "benefit" of the profession:—

Case 1 was that of a farmer's wife, who, having been under the care of a neighbouring surgeon for inflammation at the ankle-joint at the climacteric period of life, and not progressing towards recovery as rapidly as she and her friends wished, consulted the late Mr. Hutton, who, as usual, diagnosed dislocation, and put her through the manipulative processes. I saw her one week afterwards with evident suppuration in the joint, which I opened, and gave exit to a teacupful of pus, and having placed the limb carefully up in splints, hoped for a recovery; but as the patient's constitutional powers were failing, a consultation was held with Mr. Birkett, of Guy's, who decided to amputate, and although the patient survived sufficiently long (six weeks) to allow the healing of the stump, the powers of life under the strain they had undergone failed, and an attack of general purpura carried the patient off.

Case 2 was that of a youth suffering from hip-joint disease, who had also been under the care of a neighbouring surgeon, and had been treated by rest with the long splint, and no doubt was progressing towards recovery; but the friends became impatient, and consulted Dr. Hutton, who diagnosed dislocation, put the hip in, and I saw the case some little time afterwards with profuse suppuration in the joint, the pus effecting its exit by numerous sinuses. This boy died exhausted.

If such are some of the results *in rure*, what must they be *in urbe*?

I am, Sir, your obedient servant,

West Malling, April 8th, 1871. SAMUEL PRALL, F.R.C.S.

OUT-PATIENT HOSPITAL REFORM.

To the Editor of THE LANCET.

SIR,—You have kindly allowed me on several occasions to appeal to the profession for funds to carry out the work of the committee appointed to inquire into the subject of out-patient hospital administration. The response I have met with has hitherto been very unsatisfactory. Yet most persons see that no question can possibly affect the interests of the medical profession more directly than this, and espe-

cially those members of the profession who are engaged in general practice. It is their interest, far more than that of the staffs of hospitals and dispensaries, which is at stake, and if they do not now come forward to help the work of the committee, they will have no *locus standi* for complaint in future.

At the meeting which was held on the 20th inst., the late committee, having finished its work and presented its report, was dissolved, and a smaller committee was appointed to carry out the resolutions which were adopted by the meeting. The former committee has, however, some liability, for which I suppose I am responsible, and if my payment of the debts could secure effective reform in our out-patient departments, I would gladly bear the expense, for I believe they are at present a gross injury to the profession, and a scandal to the public. But there is much *work* to be done, and work, too, which will involve expense. The experience of the late committee in this respect will undoubtedly act as a warning to the present, and it cannot be expected that they will both work and pay. I do not speak now by the authority of the committee, but for myself. I can only say that unless some better response is made to this appeal than has been accorded to my former letters, I should strongly advise the committee to drop the whole question.

I remain, Sir, your obedient servant,

27, George-street, Hanover-square. ALFRED MEADOWS.

P.S. The Chairman of the late meeting, Sir William Fergusson, made an appeal for funds, the result of which was donations to the amount of *ten shillings!!*

Copies of the report of the committee may be had by applying to me and sending a few postage stamps.

"STRANGE COURSE OF A UTERINE SOUND."

To the Editor of THE LANCET.

SIR,—I observe in THE LANCET of the 15th inst., among its "Foreign Gleanings," and under the heading "Strange Course of a Uterine Sound," the remark that "it would be interesting to inquire whether, in this country, such a phenomenon has been observed."

Now I beg to refer the writer, and your readers, to a paper by me, entitled, "On a hitherto undescribed Disease of the Uterus—namely, unnatural patency of the inner extremity of a Fallopian tube," published so long ago as June, 1856. Hildebrandt, in his paper "On Sounding the Tubes," published in 1868 in the *Berlin Monthly Journal of Midwifery*, refers to this paper. In November, 1865, I published a paper in the *Edinburgh Medical Journal* which enters at some length on the same subject.

I might make other references to show that this subject was originally discussed and described in this country.

I am, Sir, your obedient servant,

J. MATTHEWS DUNCAN.

Charlotte-square, Edinburgh, April 18th, 1871.

To the Editor of THE LANCET.

SIR,—In your "Foreign Gleanings" of April 15th, you refer to the cases published by Hildebrandt and Hoening, in which the sound perforated the fundus of the uterus, and you suggest that it would be interesting to know if such a phenomenon has been observed in this country. It is quite well known, and was especially so to the late Sir James Simpson, who regarded it as of no consequence. I remember being present when a gentleman exclaimed to Sir James that he could not reach the fundus. "Oh, you've gone past it," was his answer. It has happened twice to me to perforate the fundus unwittingly; and I intentionally made use of it for the purposes of diagnosis on one occasion, when, in consultation, I could not otherwise persuade my colleague that the case was one not of polypus but of multiple fibroma of the walls of the uterus. I never saw any ill result follow the accident, and I have an indistinct recollection of seeing a notice somewhere or other of an enthusiastic gynæcologist, with more eccentricity than surgical discretion, having proposed to tickle the diaphragm through the fundus uteri in cases of hysteria.

Yours obediently,

Waterloo-street, Birmingham, April 17th, 1871. LAWSON TAIT.

POOR RELIEF IN THE METROPOLIS.

To the Editor of THE LANCET.

SIR,—Will you allow me to supplement Dr. Rogers's request a week or two ago by asking the whole of the profession to send, *without delay*, a letter somewhat similar to the following to their representatives in Parliament:—

"Dear Sir,—May I request your attendance at the House of Commons on Friday next, May 5th, in order to support Mr. W. H. Smith's motion for a Royal Commission on the Relief of the Poor. I do so most confidently and conscientiously. "I am, dear Sir, your obedient servant,

"_____"

Such an appeal from the profession would carry the day; and the sick poor have none but the profession to look to.

I am, Sir, your obedient servant,

Worcester, April 22nd, 1871. W. WOODWARD, M.D.

NEWCASTLE-ON-TYNE.

(FROM OUR OWN CORRESPONDENT.)

SMALL-POX IN NORTHUMBERLAND AND DURHAM.

THE epidemic continues to spread in the mining and colliery districts of the two counties, but in the large towns, such as Newcastle, Gateshead, and Shields, the number of attacks is diminishing. In the last-named town only has it appeared with anything like its old severity. The revaccination panic is also subsiding; the demand for lymph has diminished, and we can get through our day's visiting now without long conversations with heads of families on what was the leading topic of the day. The various hospitals have, however, prohibited the visits of patients' friends as a measure of precaution, except under certain restrictions, designed to limit the disease.

THE CHILDREN'S HOSPITAL.

The governors of this institution have lately elected a general practitioner to the vacant post of physician at their hospital. This, I believe, is a new step here; for although, perhaps, the line of demarcation between consultants and general practitioners has not always been strictly observed with us, yet this is the first time "the barrier," as we may say, has been openly thrown down. There can be no question as to the ability and other desirable personal qualifications of the gentleman elected, who is much respected with us; but this, of course, is quite a different matter.

THE LATE DR. H. GRAINGER STEWART.

The Committee of the Newcastle-on-Tyne Borough Lunatic Asylum, who have just issued their report for 1870, pay a tribute to the memory of this lamented physician, who died after a very short illness at the asylum, from an acute attack of rheumatic fever. They say "his loss will be much felt by the visiting justices. He was a gentleman of great ability, and a most valuable public servant. He will be long regretted by everyone connected with the asylum." I may add that he was equally respected by his professional brethren here.

NEWCASTLE INFIRMARY.

At the last anniversary Court of the Governors of this institution, it was stated that Sir W. G. Armstrong had taken on himself the whole expense of the new works of improvement in connexion with the building, calculated to amount to £2500, and now nearly complete, having been retarded by the severity of the winter. The whole number of cases treated by the hospital has been 4378 for the year. These figures do not apply to "casuals," which amount to 11,835. Besides these, 3500 have been relieved on application by some minor surgical operation. Finding that the permission to enter without letter the female lock wards was liable to abuse, the committee have required that the cases of persons applying for admission a second or third time should be laid before them. Last year the number of persons admitted to these wards was 214; this year it has been 174, or 40 less. Reference is made in the report to the "Hospital Sunday" movement, from which the charity derived upwards of £1000; also to the effort, in a great mea-

sure originated by Dr. Page, the senior house-surgeon, to decorate the walls with coloured prints and drawings, which has been very successful. The late Sir John Fife is mentioned as one who for half a century occupied an important position in public affairs, took a prominent position amongst the surgeons of this country, and whose name is inseparably connected with the institution. Dr. Gibb, who has retired from office, carries with him into private practice the best wishes of the friends of the institution. Mr. Abbott, whose practical benevolence is well known in this district, has offered to pay the salary of a trained superintendent of nurses, provided the medical staff have practical control of the appointment. Mr. Jeaffreson, one of the assistant-surgeons, read a memorial, complaining of the position &c. of the four assistant-surgeons to the infirmary; setting forth, amongst other grievances, that "apart from the unsatisfactory nature of their duties, their position in the infirmary was not one that was conciliating. They had no seat on the medical board, and they received no share of the emoluments derived from students' fees, although the chief instruction and practice was derived from the casuals, who were supposed to be under the charge of the assistant-surgeons."

Newcastle-on-Tyne, April 17th, 1871.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

OPPOLZER is no more. The great Clinical Professor, who for so many years has, side by side with Skoda, maintained the fame of the Vienna school, has quickly and unexpectedly passed away. On Easter Monday last, after suffering for a few days before from a slight attack of diarrhœa, he complained of pains in his neck. He nevertheless was at his clinique, as usual, on Tuesday; but while lecturing was suddenly seized with giddiness, and fell down. He recovered after a few minutes, and was able to finish his lecture. He was not even prevented by a second similar attack from continuing his practice as usual and from giving advice to the numerous patients who came to consult him at his house during the following two days, although he felt himself getting rapidly weaker, and had a continually increasing fever. On Thursday the latter became extremely violent, and the diarrhœa excessive. Professor Skoda was called in, and immediately warned the family of the patient of the dangerous state he was in, but without making a distinct diagnosis. It is remarkable that Oppolzer himself was the only person who made a correct diagnosis of his disease, and declared that he was suffering from exanthematic typhus, although at the time there was no eruption on the skin. That Skoda should have failed to diagnose the nature of the complaint is less remarkable when it is remembered that in one of his latest lectures he stated that "one must not make a diagnosis of it in Vienna on account of its rarity there." It is, however, certain that several cases have lately occurred in this city. On Saturday, the day before he died, it was reported in Vienna that he had acute miliary tuberculosis. On Saturday evening, after an apparent improvement in the early part of the day, Oppolzer became delirious, and, imagining himself back in his favourite wards, delivered connected clinical lectures, and addressed the students whom he thought were around him. During the night his breathing became oppressed, and his pulse irregular, and in a state of complete unconsciousness he died at half-past one on Sunday afternoon, April 16th. A few hours before his death his skin was covered with the characteristic eruption of true typhus.

Oppolzer was born at Gratzen, in Bohemia, in 1808. His parents had just sufficient means to send him to the Gymnasium, in Prague, but they both died soon after his entry there, and he was left with very narrow means to make his own way in the world. By great prudence, and by giving lessons to others, he was able to finish his medical studies, and graduated in 1835 with a thesis; "De Febri Nervosâ Intestinali, vulgo Typho Abdominali, anno 1834, Pragæ epidemica observatâ." In 1838 he began private practice in Prague. In 1841 he was made Professor in the Medical Clinique of the Prague Hospital. In 1848 his fame as a teacher and physician led to his being appointed Clinical Professor at Leipsic, and in 1856 to his promotion to Vienna. Oppolzer was no less distinguished in private practice than in public teaching. He was sent for to consultations in all parts of the Continent, even to Russia, and he attended the late Cæsarewitch in his illness at Nice. He won his patients equally by his skill as by his kindly manner and "imposing appearance." Lately, since an attack of pneumonia in 1864, he had lost his portliness, and became emaciated in a high degree, so that he appeared a different man from that represented in photographs of two or three years ago. His love for medicine was intense. He would stay several hours in his wards in the morning, and revisit them in the afternoon, when his private patients had been seen. No post-mortem of a patient from his wards, during thirty years' clinical work, was made in his absence if he could possibly be there; and his pupils relate how he seemed to forget the whole world while he compared the morbid appearances found with the physical signs during life. With his out-patients and in the wards he always stood, and yet never seemed to tire. He *believed* in therapeutics, and laid down definite rules for the employment of drugs. As a master of diagnosis he was unsurpassed. In the examination of the chest by percussion he used the palmar surface of the fingers of his right hand to percuss the left placed on the thorax, and kept his fingers *extended*. To bystanders this method gave scarcely any variation in the sound in different regions, but Oppolzer diagnosed by the sense of resistance. His popularity as a teacher made his wards almost inconveniently crowded with students, and as he spoke without fully opening his mouth, it was difficult, at a little distance, to hear what he said.

The funeral of the distinguished man took place on Tuesday, April 18th, in the afternoon, and was attended by a very large number of students, and by all the professors and men of note in Vienna. The pall was carried by Oppolzer's former and present assistants. Professor Arlt made a short oration over the grave. The death of Oppolzer, coming so soon after the retirement of Skoda has, of course, caused great dismay among the students, who find themselves at the beginning of their summer session almost teacherless, for Professor Duchek's wards and laboratory are not yet ready for his reception. In this emergency it is reported that a petition to Dr. Skoda is being signed by the students, asking him for the present to give at least one lecture weekly on Internal Pathology. As possible successors to Oppolzer's chair, Dr. Schrötter of Vienna, Dr. Körner of Graz, and Dr. Finger, are mentioned from Austrian universities; and Dr. Lebert and Professor Bamberger, from Wursburg, from German schools; but at present no particular name can be picked out as specially probable. The difficulty of choosing the man who shall follow Oppolzer will be very great; for, as the *Vienna Medical Press* says, "Great clinical physicians are still rarer than famous tenor singers." And so—

"The old order changeth, giving place to new,
Lest one good custom should corrupt the world."

Vienna, April 19th, 1871.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen, having passed the required examination on April 27th, were admitted as Members:—

Dickinson, Edw. Harriman, M.A. Oxford, M.B. & M.C. Edin., St. George's Hospital.
Fotherby, Henry Isaac, M.D. Lond., Finsbury-square.
Winslow, Lyttleton Stewart, LL.B., M.B. Camb., Hammersmith.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Court of Examiners on April 11th, 12th, and 13th:—

Arthur Nicholson, George F. Fenton, Frederick Barrow, E. W. White, A. C. Hutchings, Ashley Gibbings, and T. H. E. Amyot, King's College; Montagu H. C. Palmer, George Fletcher, A. V. Maybury, S. Taylor, George Cleghorn, W. H. Coates, and Isaac Bonlger, St. Thomas's; F. J. Smith, Edgar R. L. Crespin, Frank T. Paul, Herbert P. Tayler, Thomas Evans, F. J. M. Palmer, Francis Y. Sweetland, Robert Manser, George Snell, James S. Whitaker, Alexander Willcocks, Ernest Field, Rupert C. Clucken, Francis T. Atkins, H. H. Clyma, Sydney H. Vines, Richard Coom, J. P. Bevan, Sydney W. Spark, Charles Knott, Chas. C. Godding, A. W. Emms, and A. E. Bevers, Guy's; Robt. Kershaw, Samuel Welch, F. E. Pocock, Charles W. Drew, Robert J. A. Dobbie, John Blunsom, and Thomas H. Hayden, London Hospital; John B. D. Triggs, Evan

Powell, Thomas W. Thompson, William D. Haslam, Henry Colgate, Edmund Venning, and Cyrus A. Clifton, University College; George Murphy, Herbert Page, Joseph Ward, and Arthur W. Strickland, Birmingham; Thomas J. English, Herbert M. Ellis, and Geo. S. Seccombe, St. George's; Wm. Peacey, E. S. Greensill, F. C. Clarke, and W. Harvey, St. Bartholomew's; Julian A. Lea, Henry Hex, and A. E. R. Stephens, Charing-cross Hospital; Henry H. Smith, Frank Greaves, and George Prothero, Middlesex Hospital; G. H. Bishop, E. E. Mahon, and J. F. Carolan, St. Mary's; David A. Bradbury and Henry B. Hewetson, Leeds; Wm. Hayward, David L. Parry, and Edwin Riding, Liverpool; Wm. T. Wilson, John R. Murray, G. Hassell Huntley, Wm. Johnson, and James Smith, Newcastle-on-Tyne; Alfred Reckless, Sheffield; H. W. Drew, Edinburgh.

Of the 108 candidates examined on the above days, 24 failed to satisfy the Court, and were referred for a period of three months' further anatomical and physiological study.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on April 20th:—

Boreham, William Todman, Cantley, Norfolk.
Llewellin, George Joseph, Haverfordwest.
Matcham, Alfred, Lowestoft.
Parry, Thomas William, Carnarvon.
Rovenhill, Edward Burton, Arlingham, Gloucestershire.
Reston, Henry, Stretford, Manchester.
Wacher, Frank, Underdown, Herne, Kent.

The following gentlemen also on the same day passed their first professional examination:—

Henry Pelham Deacon, St. Bartholomew's Hospital; Walter Knowsley Henson, Hull Medical School; George John Seale, Middlesex Hospital.

UNIVERSITY OF ST. ANDREWS.—The following gentlemen, having passed the required examination, obtained the degree of Doctor of Medicine on April 22nd last:—

Brown, George, Kensal-green.
Carlaw, John, Assist.-Surgeon Army, Glasgow.
Crawford, Cooper Hayes, Stafford.
Harris, Henry, Redruth, Cornwall.
Harvey, John, Birmingham.
Muscroft, Henry, Pontefract.
Underhill, Thomas, Tipton.

UNIVERSITY OF ABERDEEN.— At the late Medical Graduation term, the following candidates, after the usual examinations, received degrees in Medicine and Surgery:—

DEGREE OF M.D.

Dutt, Russick Laul, Calcutta.
Ghose, Kristo Dhan, Calcutta.

At the same time the following gentlemen received promotion to the degree of M.D.:—

Arbuckle, Hugh Wight, Thorne, Doncaster.
Coutts, James Allen, Banchory-Ternan.
Crowther, Edward Lodewyk, Alford, Lincolnshire.
Cullen, James, Chumparun, Bengal.
Dyer, Thos. Birch, Bethlem Royal Hospital, London.
Wood, Alexander, Edwardesabad, Bengal.
Woodford, Edward Russell, Ventnor, Isle of Wight.

DEGREE OF M.B.

Benham, William Thomas, Bristol.
Brotchie, Theodore Rainy, Aberdeen.
Carmichael, Archibald, Maryculter.
Cobban, Alexander Richard, Whitfield, Berkeley.
Creighton, Charles, Peterhead.
Crombie, Charles Mann, Aberdeen.
Davidson, Charles, Aberdeen.
Davidson, George Farquhar, Aberdeen.
Edwards, William Henry, Antigua.
Fasken, William Andrew Durnford, London.
Goodhart, James Frederic, Brighton.
Gordon, John, Elgin.
Jotham, George William, Kidderminster.
Knaggs, Samuel Thomas, Newcastle, New South Wales.
Lawrence, Nathaniel, Longside.
Lowson, David, Aberdeen.
Maclean, John Cassilis Birkmyre, Kiltearn, Ross-shire.
M'Calman, Hugh, Caithness.
Marshall, Lewis Walter, Bristol.
Milne, Thomas, Ellon.
Raitt, Thomas, Aberdeen.
Shepherd, James, Aberdeen.
Simpson, James, Aberdeen.
Waldo, Henry, Clifton.
Walsham, William Johnson, London.
Williams, Alfred Henry, London.
Wilson, Alexander, Rayne.

DEGREE OF C.M.

Benham, William Thomas.
Brotchie, Theodore Rainy.
Carmichael, Archibald.
Cobban, Alexander Richard.
Creighton, Charles.
Crombie, Charles Mann.
Davidson, Charles.
Davidson, George Farquhar.
Edwards, William Henry.
Fraser, George Innes.
Goodhart, James Frederic.
Gordon, John.
Jotham, George William.
Knaggs, Samuel Thomas.
Lawrence, Nathaniel.
Lowson, David.
Maclean, John Cassilis Birkmyre.
M'Calman, Hugh.
Marshall, Lewis Walter.
Milne, Thomas.
Raitt, Thomas.
Shepherd, James.
Simpson, James.
Waldo, Henry.
Walsham, William Johnson.
Williams, Alfred Henry.
Wilson, Alexander.

ROYAL COLLEGE OF SURGEONS OF IRELAND. — At a meeting of the Court of Examiners held on April 11th and following days, the undermentioned gentlemen passed their primary examinations in Anatomy, Physiology, and Materia Medica:—

William Hodson Abbott, John Hall Andrews, Robert Baxter, Robert A. Bingham, John Thomas B. Bookey, Henry Borthistle, Edward Bowers, Henry Walter Boyd, John Noble Bredin, Thomas Henry Brown, Arthur C. Clarke, George Cooke, Richard A. S. Daly, James Dawson, Robert Nickle Denning, Rowland John Denny, Thomas De Renzy, Andrew F. Dobson, William C. Downing, Edmund J. Dowling, Henry E. Evans, Thomas Fenton, Francis Flood, John B. Forster, Nicholas French, Jas. A. Hanrahan, Henry Heyward, John Armstrong Irvine, Andrew Irwine, Joseph H. Lockwood, Edmund Lucas, Patrick J. MacNamara, Charles W. Magrane, William Mahood, Charles J. Mahon, Robert Henry Miller, Andrew Bernard Morris, Edward Joseph Murtagh, Herbert Manderville Nash, Michael O'Connor, Nicholas Sweetman O'Farrell, Patrick George O'Flagherty, James B. Panter, Robert Francis Russell, Harvie Scott, William Alexander Sharpe, James H. Shehan, James Smith, Robert Stirling, Edward Charles Thompson, Chas. Palmerston Turner, William John Vance, Samuel Walsh, Frederick William Warren, Hugh George Webb, Samuel Henry Webb, Henry E. White.

DONATION.—The Dowager Marchioness of Westminster has given £2000 towards the endowment fund of the Cottage Infirmary about to be erected at Shaftesbury as a memorial to the late Marquis of Westminster.

A DEPUTATION of householders in Upper Clapton lately waited upon Mr. Newton, at Worship-street Police-court, to solicit his assistance in procuring the suppression or removal of Mrs. Gladstone's Small-pox Hospital in that district. It was stated that the hospital is situate in the midst of a populous neighbourhood, and since its establishment three months ago, the occupiers of nearly all the surrounding houses had given notice to leave; many had actually gone away, and the whole neighbourhood was being deserted. Mr. Newton said that, while entirely sympathising with the deputation, he did not see his way clear to assist them in attaining their end. He advised them to write to Dr. Brewer, M.P., of the Asylums Board.

Medical Appointments.

ARGENT, S., M.R.C.S.E., has been appointed a Surgeon to the Union Provident Sick Society, Birmingham.

BUNCLE, Mr. A., has been appointed Medical Officer and Public Vaccinator for District No. 6 of the Pontefract Union, Yorkshire, vice C. J. Rhodes, M.R.C.S.E., deceased.

CRAIG, G. A., M.B., has been appointed a Surgeon to the Union Provident Sick Society, Birmingham.

EDWARDS, W. H., M.B., M.C., M.R.C.S., has been appointed Resident Midwifery Assistant at St. Bartholomew's Hospital.

GRIFFIN, L. T., Ext. L.R.C.P.L., has been elected Visiting Physician to the Kerry District Lunatic Asylum, Killarney, vice Murphy, appointed Resident Medical Superintendent.

JOHNSTON, A. C., R.N., M.R.C.S.E., L.K.Q.C.P.I., &c., has been appointed Medical Officer and Public Vaccinator for the Shap District of the West Ward Union, Westmoreland; also Medical Officer to the Odd Fellows' Society, Shap, vice T. Blades, L.R.C.P.Ed., L.F.P. & S. Glas., deceased.

JONES, G., L.R.C.P.Ed., L.R.C.S.Ed., L.F.P. & S. Glas., has been appointed Medical Officer for the Framlingham District of the Plomesgate Union, Suffolk, vice Willson, deceased.

KENNEDICK, J. S., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Clonmel, vice F. Fitzgibbon, L.K.Q.C.P.I., M.R.C.S.E., deceased.

KIPLING, W., L.R.C.P.L., M.R.C.S.E., has been appointed House-Surgeon to the Metropolitan Free Hospital, vice Beverley S. Ringer, M.R.C.S.E., resigned.

LITTLEJOHN, S., M.B., Assistant Medical Officer, has been appointed Resident Medical Officer to the Central London District Schools, Hanwell, vice W. T. Coster, deceased.

LLOYD, J., L.R.C.P.L., M.R.C.S.E., has been elected Resident Medical to the Swansea Hospital, vice H. T. Sylvester, M.D., resigned.

LLOYD, J., M.B., M.R.C.S.E., has been appointed a Surgeon to the Union Provident Sick Society, Birmingham.

MILLSON, G., M.R.C.S.E., L.R.C.P.L., has been appointed Assistant Medical Officer, Female Department, Middlesex Lunatic Asylum, Colney-hatch, vice R. Carter, M.D., M.R.C.S.E., L.S.A.L., resigned.

PARSONS, T. E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Haughton District of the Darlington Union, Durham.

POOLEY, R. C. M., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Resident Medical Officer to the Rochdale Infirmary and Dispensary, vice Charles Ogden, L.R.C.P.Ed., M.R.C.S.E., appointed Medical Officer for the Butterworth District of the Rochdale Union.

SHOPPEE, E. C., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the London and North-Western Railway Servants' Friendly Society, vice G. Woolley, M.D., L.R.C.S.Ed., deceased.

STRATHY, F. E. L., M.D., has been appointed Assistant to the Extra Physicians of the Royal Hospital for Sick Children, Edinburgh, vice Dr. J. Dickson, jun., whose term of office has expired.

THOMAS, O. D., M.R.C.S.E., has been promoted from the 5th Hanbury Rifle Corps to be Assistant-Surgeon in the 2nd Administrative Battalion of Monmouthshire Rifle Volunteers, vice S. Prosser, F.R.C.S.E.

TOSSWELL, L. H., M.B., M.R.C.S.E., has been elected House-Surgeon and Apothecary to the Devon and Exeter Hospital.

WHARRY, C. J., M.R.C.S.E., has been appointed House-Physician to St. Bartholomew's Hospital.

Births, Marriages, and Deaths.

BIRTHS.

JAMES.—On the 23rd inst., at Perry-vale, Forest-hill, the wife of A. James, M.D., of a daughter.

MADGE.—On the 20th inst., at Fitzroy-square, the wife of Henry M. Madge, M.D., of a daughter.

NEWCOMBE.—On the 19th inst., the wife of Dr. Newcombe, of Gateshead, of a son.

PALMER.—On the 28th inst., at Barton-under-Needwood, the wife of Clement Palmer, L.R.C.P.Ed., of a son.

PILLIN.—On the 23rd inst., at Brixton, the wife of L. B. Pillin, L.D.S. R.C.S.E., of Albemarle-street, of a son.

SHARPE.—On the 21st inst., the wife of G. M. Sharpe, L.F.P. & S. Glas., of Hunslet, Leeds, of a daughter.

THOMSON.—On the 16th inst., at Kingswinford, near Dudley, the wife of John Thomson, L.R.C.P.Ed., L.R.C.S.Ed., of a son.

WOLFE.—On the 23rd inst., at Brandon-place, Glasgow, the wife of Dr. Wolfe, of a son.

MARRIAGES.

HUNTER—CHALK.—On the 20th inst., at St. Luke's Church, Westbourne-park, William Frith Hunter, of Margate, to Emma Mary, youngest daughter of the late Frederic Augustus Chalk, of Eythorne, Kent.—No Cards.

LECKIE—COOKE.—On the 25th inst., at Glyntaff Church, Pontypridd, Glamorganshire, John Lindsay Leckie, L.R.C.P.Ed., &c., late of H.M.'s Indian Navy, to Sara, only daughter of Dr. Wm. Cooke, of Pontypridd.

DEATHS.

BOURNE.—On the 15th inst., R. C. Bourne, L.R.C.S.I., of Nottingham, formerly Surgeon 3rd Dragoon Guards, aged 48.

GARRETT.—On the 9th inst., at Colet-place, Commercial-road East, Mark Brown Garrett, M.R.C.S., L.S.A., aged 50.

GARRETT.—On the 23rd inst., Richard Garrett, M.R.C.S.E., of Hemingborough, Howden, Yorkshire, aged 75.

GRANT.—On the 8th inst., Thomas Walker Grant, M.D., M.R.C.S., of Edgeware-road, aged 53. A man of known integrity, benevolence, and skill.

HENRY.—On the 24th inst., James Henry, M.D., of Bury St. Edmunds, Physician to the Suffolk General Hospital.

SIBBIT.—On the 7th inst., Edward Sibbit, M.R.C.S.E., of Dover, late Surgeon R.N., aged 87.

SIMPSON.—On the 22nd inst., at Old Kent-road, Alison Veitch, the beloved wife of George Simpson, L.R.C.P., &c.

STRONG.—On the 22nd inst., after a long illness, Maria Mary, the beloved wife of Henry John Strong, M.D., of North-end, Croydon, Surrey.

SWALES.—On the 25th inst., at Sheerness, Mary, the wife of Edward Swales, Surgeon, aged 49.

Notes, Short Comments, and Answers to Correspondents.

BARRACKS FOR THE MILITIA.

IN the new scheme of army organisation we hope that the question of providing barracks for the militia will not be lost sight of. Nothing can be more destructive of the physical powers of the young men who enlist for the militia than the practice of billeting them in beer-shops and public-houses, and, where there are no public-houses, in already overcrowded cottages. In the larger towns the soldier soon acquires a taste for life in a tap-room, and it is not necessary to demonstrate how incompatible that life is with habits of regularity, discipline, and health. But it is even worse in the case of a small town where there are but few public-houses. Take the case of Cirencester, for example, where during the training of the regiment there is an addition of 900 adults to a population of between 6000 and 7000 already under-housed. Of course the pressure is chiefly borne by the poor, and instances are not uncommon where four militiamen have been quartered upon a labouring man having but two rooms in his cottage, and these already filled. We need not describe the miseries which closely packed inhabitants are forced to endure from the performance of all domestic offices in so limited a space. But we may point out the danger of assembling regiments for training, and of so housing them in the face of the epidemic of small-pox. Indeed a mere spark of contagion of any kind would burst into a blaze, and it would be difficult to predict where the injury would stop. One would think that it would be good instruction for the Engineers to air their tents, and certainly it would be a good opportunity of demonstrating that a healthy English citizen soldier can as well bear to camp out in fine summer weather as the Prussian was in winter.

Inquirens.—We never prescribe or recommend a practitioner.

A QUERY.

To the Editor of THE LANCET.

SIR,—Will you oblige me by inserting the following:—Mistura ferri aromatica and syrupus ferri iodidi, B.P., 1867. Will any of the readers of THE LANCET inform me if they ever made the above preparation, and with what result. I have made both, according, as I think, to the directions given, with the result of having the iron wine much the same at the end of the process as at the beginning.

Yours, &c.,

Hanley, Staffordshire, April 20th, 1871. IGNORAMUS.

MEDICAL RECOGNITION IN CANADA.

WHILE the Home Government are scattering broadcast the orders of St. Michael and St. George, not a single member of the medical profession in Canada has apparently been deemed worthy of the honour. The Fenian fiasco, for instance, brought a shower of orders to the military men; while the services of the eminent Canadian physician, Dr. Grant—services which the Government has enhanced by its recent expression of the value it sets on Dr. Grant's patient, Sir J. A. Macdonald—have yet to be recognised. We think the Government would be conferring honour on itself by endowing with the K.C.M.G. the medical adviser of more than one chief administrator of Canada.

A Young Surgeon.—Our columns are not open to prescriptions.

ELECTION OF MEDICAL OFFICER OF HEALTH FOR KENSINGTON.

To the Editor of THE LANCET.

SIR,—In your impression of this morning I find an allusion to myself, which, although my name is not mentioned, is calculated to do me injury. You say that you are informed that amongst the candidates for the appointment of officer of health for Kensington is "an inveterate opponent of vaccination." I believe I am the only applicant for that appointment who has written on vaccination, and therefore, I presume, the remark must have been intended to apply to me. If you had said that I was an inveterate opponent of *compulsory* vaccination, you would have been quite accurate, as I am determined to oppose the present oppressive and impolitic law so long as it exists; but it is quite incorrect to represent me as an opponent of vaccination when that operation is properly performed with uncontaminated lymph, and with the consent of the parents or other guardians of the children operated on. Previous to the publication of your remarks I had withdrawn my candidature; but I would still wish to be correctly represented. There has been so much loose talking and exaggeration on the part of professional men about vaccination that I, for one, think it quite wonderful that the non-professional opponents of the law have diverged so little from the truth. I suppose when people think they have been sufficiently revaccinated, they will at last turn their attention to the removal of the horrible nuisances which still exist in every part of the metropolis. If we decline to learn the lesson which the small-pox was designed to teach us, we shall shortly be compelled to learn it by the presence of cholera.

I am, Sir, yours obediently,

Kensington-park-road, April, 1871. EDWD. HAUGHTON, M.D.

*** *Qui s'accuse s'excuse.* Dr. Haughton has only himself to blame for being considered an anti-vaccinator, since it is difficult to believe that he entirely approves of vaccination when, without any evidence, he tells us in a pamphlet that "not less than 100,000 families have made up their minds to have nothing to do with it"; that the whole history of the establishment of vaccination in this country shows a series of protests, from well educated medical men, against the universal employment of a prophylactic which requires such an amount of care and skill to produce good and avoid bad results that no Government could honourably undertake to enforce it. Dr. Haughton ridicules the idea of unvaccinated infants becoming centres of infection. He says it is not correct to attribute the present epidemic altogether to the neglect of vaccination, and he speaks of small-pox as a disease which is manufactured afresh every hour of the day. What shall we say of the bad taste of Dr. Haughton's protest "against persons who have a pecuniary interest in extending the practice of vaccination being allowed to keep up a perpetual agitation in the newspapers, by the insertion of paragraphs full of the most astounding exaggerations, and the most virulent abuse of all who differ from them in opinion upon an open scientific question" who speaks of isolation and quarantine as the instruments by which the greatest inhumanity is practised towards those who unhappily contract small-pox?—ED. L.

Dr. Garrett, (Hastings.)—Nothing would be gained by the publication of our correspondent's letter. The attention of Dr. Abbotts Smith has been directed to the subject in our columns, and it remains for him to give some explanation of the matter.

Mr. J. B. Ryley, (Woolwich.)—As the case is to have a bearing in a Court, we think it better not to refer to it until the result is known.

Physician shall receive attention in our next.

SUBCUTANEOUS DIVISION OF THE NECK OF THE FEMUR.

To the Editor of THE LANCET.

SIR,—At the Medical Society of London on Monday last, the much discussed question between Mr. Brodhurst and Mr. Adams relative to their respective claims of having first performed the operation for dividing the neck of the femur subcutaneously was revived. The time for discussion was unfortunately very limited, or I should have mentioned the, I think, not impertinent remark I hope in either sense, that neither of them had divided the neck of the femur subcutaneously.

"Subcutaneously," speaking surgically, means an operation by which the entrance of air or the retention of any foreign substance in the wound is prevented, so that there may be no risk of setting up suppuration. Now, I venture to think that it is impossible to saw through a bone under the integuments without the entrance of air; but even if it be possible to exclude air, I can assert that it is quite impossible to saw through the bone without producing bone-dust, which must remain in the wound as a foreign body, and must suppurate out, unless removed at the time by syringing. Thus the operation is removed from the category of those surgically called "subcutaneous."

Undoubtedly both Mr. Brodhurst and Mr. Adams have divided the neck of the femur under the integuments, and the former gentleman was the first to perform the operation successfully. He only differed from Mr. Adams in making a larger external incision, and, according to the first principles of surgery, he was right in doing so.

I am, Sir, yours obediently,

Parliament-street, April, 1871. THOS. BOND, F.R.C.S.

THE DENTAL HOSPITAL, BIRMINGHAM.

THIS useful little institution, founded thirteen years ago by Mr. Adams Parker, is just undergoing a transition movement and enlargement. By the munificence of a lady, a complete apparatus for the administration of nitrous oxide or chloroform to necessitous cases is to be supplied. A consulting physician, a consulting surgeon, and two chloroformists are to be appointed, and the ordinary staff is to be increased. This hospital is a model in many respects; for it is economical in its expenditure, never gets into debt, and is free yet discriminate in its charity. The latter commendation cannot always be urged in favour either of special or general hospitals.

Mr. C. Macklin, (Enfield.)—We think our correspondent, upon further consideration, will see that we could not insert his communication.

OBSERVATIONS ON WATERCLOSETS.

To the Editor of THE LANCET.

SIR,—In reporting on the sanitary state of Liverpool, I had occasion to make the following remarks on the trough waterclosets which were invented by Mr. Newlands, the borough engineer, and are in general use in Liverpool:—

"They are undoubtedly the most simple and successful semi-public waterclosets anywhere in use. They are economical of water, and their essential arrangements, being beyond the control of the ignorant persons for whose benefit they are intended, cannot be misused. But our inspection does not enable us to affirm that these are a perfect or an absolute success. Our first objection is that they meet the wants of less than half the population. Children cannot use them without being accompanied by an adult, and even then with difficulty. The doors ought properly to be kept locked; but this is next to impossible when a closet has to serve for eight or ten houses, with two or three families in each. When left open, the seats are invariably in a wet and filthy state; whilst when the doors are locked, the lock is above the reach of the children. The impression conveyed by the inspection of very many courts at different hours of the day and night was, that the seats of the closets, especially where the closet serves for more than two houses, are but little used even by adults, and scarcely at all by women and children. It was observed, for example, that in a court of four houses no less than fourteen persons had defiled the pavement underneath the windows, most of them clearly being children; and yet in this very court there were children at play. It is exceedingly difficult to determine who is the person responsible for keeping the seats in order. Moreover, it is a labour of Sisyphus, for much of the house-slops is poured into the trough through the open seat, because the drain in the court yard will not take the solid matters which the slops contain. Close inquiry proved conclusively that the more decent women object to pass to the closet through the open street, in which, indeed, the closet often stands. There is, therefore, a very general practice amongst the women and children of using the chamber utensil, and of emptying it at nightfall through the closet seat."

All these remarks apply with greater force to every form of pan closet, whether supplied with water or not.

As these remarks have been held to imply that I object to water carriage as the best means of removing human excreta, it is quite necessary that I should explain my views. Now, I believe that there are few educated persons who would prefer privies out of doors or earthclosets inside to a well-constructed watercloset. There is no resisting the sense of cleanliness, and even luxury, which has led to its general adoption by the higher classes; but it is an expensive machine, and, like all other scientific inventions, requires a certain degree of intelligence on the part of the user, and regular supervision to keep it in good working order. All attempts to make it cheaply, and to adapt it to the capacities of an ignorant and naturally dirty population, have hitherto completely failed. I have visited hundreds of houses and courts in the metropolis and other large towns, and I never yet found the closets in a proper state, although they were in many cases constructed under the direction of the sanitary authorities, and continually inspected by them. Even in barracks, where there are special officers appointed to keep them in proper order, and where it might have been supposed the soldiers would know how to use without misusing them, it is astonishing how difficult it is to keep the seats cleanly and the pan clear. In workhouses the difficulties are still greater, especially in the country districts; and it is left to convict prisons to be the only place in which I have seen waterclosets in an unexceptionable state, and even in this case we must make the very large exception of closets fixed in cells.

The trough closet is a great improvement upon the pan closet, and the arrangements of Jenning and Macfarlane are also good; but all are open to the fundamental objection—viz., the fixed seat. The history is the same in all cases. Some one empties a chamber utensil carelessly through the hole, or in some other way the seat is wetted. The next comer stands upon the seat, because he cannot sit down, and, as the seat is not conveniently made for this mode of use, the filthy condition becomes worse and worse. No amount of scrubbing or supervision will alter this. No one will, I am sure, contend that any seat is necessary. The Turks and Hindoos positively refuse to use one; and when high Mussulmans visited Windsor Castle, the seats of the closets were removed for their special accommodation. Amongst the lower classes of this country there is a very general preference for using the lane or open field; in fact, in many villages there is scarcely any other place; whilst in all closets to which the public have access, there is the very strongest prejudice against sitting down, even amongst persons who prefer to do so in their private dwelling places. In support of this view, I would remark that I have seen no public latrines so well adapted to the lowest and poorest parts of our large towns at all equal to those which are in use upon the South-Eastern Railways of France at all the stations. They consist of a series of recesses made of slate, and rather larger than the common single urinal in this country. They open on a common passage, which is protected by a screen, and covered in with a roof open at the sides. The floor of each recess is made of stone, which slopes gently down to a central opening about five inches in diameter; this opening communicates with an underground water trough or drain, and it is closed by a simple balance valve. There is a supply of water, whereby the whole is flushed down twice a day without either trouble or delay. I never saw public latrines in such a wholesome state. They answer every purpose. It would be almost impossible to choke them up. It is difficult to render them quite unusable. They can be used by all sorts of persons and children without danger, and, by a contrivance which I propose to add, by children and adults who desire to use a seat. That proposal is, that there shall be small projecting ledges on the sides at different heights, upon which a bar or seat may be for the moment placed. This bar or seat may be taken to the place by the person using it, or it may be hung up for the use of the more civilised portion of the community. Not the least advantage of the plan is that seats may be permanently fixed at any moment without interfering with the simple arrangements on the floor; in fact, the arrangements would be susceptible of improving step by step with the habits of the people.

I venture to appeal to the medical officers of health in the metropolis and the larger towns on behalf of this very simple plan. I should much like to see it fairly tried, as I believe it is calculated to effect a very great improvement—not the least advantage being that it will save them from the unpleasant duty of perpetually interfering with landlords, and putting them to the expense of constantly repairing an impracticable machine.

Yours truly,
London, April, 1871. J. H. STALLARD, M.B. Lond.

L.M.—We do not know of any general work of the kind mentioned. Nearly every "health resort" has given occasion to a *brochure* on its peculiar climate by some local practitioner, and a few of the more prominent are mentioned by the late Sir James Clark in his work on Climate.

Mr. R. Rendle's letter shall be inserted next week.

PUBLIC VACCINATION: A SUGGESTION.

To the Editor of THE LANCET.

SIR,—The prevalence of small-pox throughout the country, and the general testimony of the local authorities in large towns, and especially in the metropolis, to the extreme difficulty of enforcing vaccination, induce me to offer a suggestion through your columns, which might be acted on with great advantage to the public, and would entail little, if any, additional trouble or expense.

It was stated in the debate in the House of Commons upon the desirability of appointing a Committee to inquire into the whole subject, that one of the main hindrances to the effective working of the Act arises from the frequent removal of the families of the poorer classes from place to place before the legal period allowed for the vaccination of infants has expired, and thus that they escape the operation altogether. An effectual remedy for this unquestionable evil might be provided by the delivery of two vaccination forms, instead of one, to the parent at the time when the birth is registered, with instructions that one is to be returned to the registrar, and that the other, duly filled up by the vaccinating officer, is to be retained, and produced when required. It would then be comparatively easy to ascertain at any moment whether children had been vaccinated or not, and the present laxity, so fraught with danger to the public, would be removed. If, in addition to this, at the time when an epidemic is anticipated, or, as at the present moment, is actually committing ravages amongst us, properly qualified men were appointed to examine the certificates from house to house, the parish officials would have a ready means of bringing the defaulters before the magistrate, and of fulfilling a duty which, from one cause or other, has been lamentably neglected of late years, with results which we have even now only partly realised.

By a re-arrangement of the form, the date of revaccination might be shown, and, if thought desirable, the success or failure of the operation might also be recorded.

Yours obediently,
Burton-road, Brixton, April 11th, 1871. CHARLES MACKESON.

BRADFORD INFIRMARY.

AT the general meeting of the Governors of the Bradford Infirmary, it was proposed—

"That the present system of electing honorary physicians and surgeons be altered, with a view to the abolition of canvassing, and the more satisfactory appointment of honorary medical officers, by the nomination of a Committee of seven members (with power to add to the number), whose functions shall be to receive applications from candidates for the office of honorary physician or surgeon, and to recommend to the Governors such person or persons as they may deem fit and proper for holding these offices, or one of them. Of these five shall constitute a quorum, and not more than three shall be elected from the Board of Management for the current year. This Committee shall be appointed annually by the Governors."

The resolution was not adopted; but the mover gave notice that he would again bring up the question at the next meeting.

THE GRADUATED CHLOROFORM BOTTLE.

To the Editor of THE LANCET.

SIR,—Dr. J. Alexander Ross has evidently been misinformed respecting the introduction of Mr. J. Astley Bloxam's chloroform bottle; therefore we think it our duty to state we made for Mr. J. Astley Bloxam the graduated chloroform bottle, according to his suggestion, about two years ago, and find upon reference to our ledger that we supplied St. Bartholomew's Hospital with one on June 2nd, 1869, thereby showing Mr. J. Astley Bloxam's idea to be original, and not based in any way upon Dr. J. Alexander Ross's invention, which was (according to his own letter) introduced about twelve months later than Mr. J. Astley Bloxam's.—Your obedient servants,

West Smithfield, April, 1871. ARNOLD AND SONS.

Mr. Wm. Deane (Baldock) is thanked; but we fear that the subject would not be a suitable one for our columns.

M.R.C.S.—Apply to Mr. Lewis, 136, Gower-street.

ORIGIN OF DIARRHŒA.

To the Editor of THE LANCET.

SIR,—During the past week I had several cases of diarrhœa in a ladies' school—in fact, nearly the whole of the school. The cause proved to be, supplying them with water for purpose of ablution that had been in a water-butt for two years. There was a scarcity owing to the dry weather, and it had inadvertently been used.

Another household was also seized from a different cause. A bed-room or two had been papered afresh, and a cheap size had been used to the walls. It was with difficulty it could be detected; but removal from the rooms at once revealed the cause. I am, Sir, yours truly,

April 10th, 1871. MEDICUS.

A "TENDER" APPEAL.

THE guardians of the Tavistock Union, wanting a medical officer to take charge of the paupers of the Beerferris Union lately, published a handbill, addressed "Medical Practitioners," and inviting tenders from "duly qualified members of the medical profession." Salary £30 per annum. We would suggest to the guardians of this union that this appeal, by bill, for tenders to medical men is not respectful to the profession, and is the least likely way to procure that which is required—"a duly qualified" practitioner. We gather from our list of appointments that the gentleman elected was Mr. Kent, M.R.C.S.E. Mr. Kent is probably the youngest practitioner in the district, who has not yet had time even to take his medical diploma.

THE SNAKE POISON.

To the Editor of THE LANCET.

SIR,—In an article in your journal of March 25th on the above subject, you say: "So far as Dr. Fayrer's experiments go, venomous snakes are not poisonous to one another, although the less are probably affected by the more poisonous kinds." I have for a long time thought that all venomous creatures contain somewhere in their own bodies the antidote to their own poison, because their bites or stings have little or no effect upon members of their own species, though perhaps deadly to man or other animals. I have seen two spiders, a species of Tarantula, fight and tear each other to pieces. Their poison had apparently no effect upon each other; but the strongest eventually conquered from superior strength. One of the same species of spider placed in a glass-box with a lizard five or six inches long, killed the lizard with one grip in a very short time, showing that the poison must have been very potent. In Barbadoes and some other of the West India islands the negroes cure the bites of centipedes and the stings of scorpions in the following manner:—Two or three centipedes or scorpions are kept in a small bottle of rum, and when anyone is bitten or stung, some of this rum is rubbed into the wound, and the cure is, as I can testify from personal experience, almost instantaneous. I have been told that the natives in some parts of Central America use the snake's gall-bladder as an antidote to the bite. I was told by a friend the other day that some years ago he saw a large retriever bitten in the mouth by an adder the snake was killed. In a short time the dog's mouth and throat got much inflamed, and began to swell, &c., and one of the labourers cured the dog by taking the snake's gall-bladder, and rubbing it well into the dog's mouth and throat. When in the West Indies I always keep two or three centipedes in some rum in case of accidents, and I find this rum cures the bites of mosquitoes, sand-flies, &c. &c. Last November I wrote to Drs. Fayrer and Shortt and Professor Halford, knowing that those gentlemen have been trying experiments for a long time in reference to snake-poison. I told them my idea that all poisonous animals contain in their bodies the antidote to their own poison, and also the fact that essence of centipedes or scorpions is a certain cure for the poison of those reptiles, and I asked them to try the following experiment: Put one of the most poisonous snakes in some rum for some days, and then try some of this rum externally and internally as a cure for snake-bite. I have no means of trying this myself, or should have done so long ago; but I hope that one or other of those gentlemen will try it.

I have ventured to write to you on this subject, because it is one of great importance to the human race, and it appears to me only natural that poison-bearing animals should be protected from the effects of their own poison.

I am, Sir, your obedient servant,

Southampton, April 12th, 1871. A WANDERER.

HASTINGS GOLD MEDAL OF THE BRITISH MEDICAL ASSOCIATION.

M.D calls our attention to the delayed award of this Medal for 1870. Our correspondent observes:—

"It was reported at the annual meeting at Newcastle in August last year that the adjudicators could not come then to any decision on account of the number and great length of the essays sent in. Nothing more has been heard of the matter to the present moment, although the essays have been nearly ten months under consideration."

Mr. P. P. Nind, (Torquay.)—We regret that, after much search, we have failed to recover the paper in question.

CAIRO AS A HEALTH RESORT.

To the Editor of THE LANCET.

SIR,—Some months since you spoke of Mrs. Appleton's scheme for providing a home for invalids in Egypt with approbation. I have to-day received the enclosed note from a lady who wintered there. If it be of sufficient interest, in your opinion, to publish it, it is at your service.

Yours, &c.,

RICHD. NEALE, M.D. Lond.

Boundary-road, St. John's-wood, April 18th, 1871.

MY DEAR DR. NEALE,—Having returned from Egypt, I seek to trouble you with a few lines on account of a matter I am much interested in. I think you know about Mrs. Appleton, and her desire to set up in Cairo a sanatorium for English people. My own opinion is that a house in Cairo where one would have most of our own home comforts, and careful attention if required, would be an unspeakable boon to invalids, and to those who, not being invalids, are yet very dependent on daily comforts for the continuance of health. Of the climate I cannot speak too highly; but its advantages are very much neutralised by the absence of comfort which characterises hotels in Egypt. I had full experience of the value of Mrs. Appleton's promptitude and efficient nursing in a case of very serious illness.

I remain yours truly,

J. M.

A CORRESPONDENT recommends a work—J. R. Dobson on the Ox—as that best suited as a guide for the treatment of diseases of cattle.

Mr. Husband.—Next week.

DR. WOODWARD'S OBSTETRIC SUPPORT.

To the Editor of THE LANCET.

SIR,—Several minor improvements having lately been effected in this instrument, I shall be happy to hear from any gentlemen who are using it, when I will communicate with them.

Yours truly,

Worcester, April 11th, 1871. B. B. PLUM.

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

A Student complains of the inconvenient arrangement that exists at the College of Surgeons in the manner of conducting the primary and pass examinations for the diploma of Member, by which every student on presenting himself for examination has to wait about three hours. He says:

"Last Saturday I presented myself at ten A.M. at the College, according to the official instructions which I received. When I arrived there, you may imagine my surprise on being told that the examination would not be till one P.M. About eleven o'clock one of the officials called up those students within the building to give up their cards, and about half an hour later we were allowed to go into a room where the fee was paid, but only one at a time; and as there were 108 candidates, of course this took up some time. Upon our paying the fee, we were informed that we should not be required till half-past twelve. About ten minutes to one we were admitted to the examination-room, when the papers were given us."

Our correspondent suggests that a writing-room should be fitted up, and that a few papers, books, &c., should be placed at the disposal of those who would like to beguile the weary hours.

MOTHERS' MILK.—CHLORAL.

To the Editor of THE LANCET.

SIR,—Permit me to add my humble testimony to Dr. Tidy's as to the value of suet for infants when the mother's milk is deficient in quantity or in nutriment. Chopped up fine with milk (mother's or cow's), and given several times a day, it produces most remarkable results. I have repeatedly found it answer, with little or no other treatment, in hydrocephaloid disease and simple atrophy.

In THE LANCET for March 4th there is a letter from a correspondent on the action of chloral being modified by the vehicle in which it is administered. I do not think the remarkably increased effect can be due entirely to the more rapid absorption of the chloral when dissolved in simple camphor julep than when dissolved in syrup. I believe the syrup had been prepared some time, and had become weaker and weaker by keeping, so the dose had need to be increased to keep up the effect. The julep solution was freshly prepared, and therefore of full strength. I am in the habit of using large quantities, and find that a day or two will make a great difference in the strength. It is, therefore, important that chloral should not be kept in solution for dispensing, unless large quantities are used, and then it ought to be freshly prepared at least every other day. The quality of the chloral varies remarkably, even from the same maker; some is exceedingly volatile, and consequently keeps a much shorter time than other preparations. I think the safest form is the recrystallised, for—

1. It is more stable than the cake chloral.
2. It is more convenient, being in the form of separate crystals, and easily weighed.
3. It is less likely to be adulterated.
4. It is of uniform strength.
5. It dissolves more readily, and the solution is clearer.

It may, perhaps, not be quite so palatable, but is certainly less pungent. I have found considerable difficulty in obtaining it, having repeatedly had the cake chloral sent as the recrystallised. It is imported from Germany, and the bottles bear a label with Dr. O. Liebreich's name on. Certainly the price is dearer; but being much less volatile it lasts considerably longer. In fact, it is sent over in loosely corked bottles.

I am, Sir, yours, &c.,

Hayward's Heath, April 18th, 1871. A. H. NEWTH, M.B.

Chirurgicus, (Newcastle-on-Tyne.)—1. We are of opinion that the latter part of the rule was infringed, unless there is some special exception made by other laws.—2. Chopart's or Hey's amputation is not usually left to the house-surgeon of any London hospital to perform at his discretion; but at the General Hospital, Birmingham, a rule exists that the house-surgeon may perform any amputation "below the ankle."

F. A. B. shall receive a reply next week.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—Would you be kind enough to insert the enclosed letters in your next issue. I am sorry to be obliged to trouble you, and occupy your time and space with such an unpleasant subject; but as Mr. Starling has not answered either of my notes, thus virtually admitting his guilt, I have no other alternative; though it would have shown more manliness in him to have avowed it, and tendered an apology.

You will remember that my charge against Mr. Starling is, that he visited, examined, and gave an opinion upon a patient at the time under my care, that opinion being openly and avowedly damaging to me, after he had heard from the patient my opinion of his case.

I am, Sir, yours truly,

Higham Ferrers, April 26th, 1871. D. THOMSON, M.D.

[COPY.]

Higham Ferrers, March 10th, 1871.

SIR,—Would you be kind enough to explain to me your conduct in regard to the man C. W——, of Rushden [Mr. Starling had the name in full]. If you consider it professional, I do not.

I am, Sir, your obedient servant,

T. J. Starling, Esq., Higham Ferrers. D. THOMSON, M.D.

P.S.—I should have referred to it sooner, but that my time has been so occupied.

[COPY.]

Higham Ferrers, March 31st, 1871.

SIR,—As, with your usual courtesy, you have thought proper to decline answering my note addressed to you about a fortnight ago, in regard to a case in which I consider you acted in an unprofessional manner towards me, I had no alternative but to lay the facts of the case before the Editor of THE LANCET for an expression of his opinion, which you will find under the title of "Medical Etiquette" on page 435 of the last number of that paper. Allow me to request that you will clear yourself of the charge, or grant me an ample apology.

I am, Sir, your obedient servant,

T. J. Starling, Esq., Surgeon. DAVID THOMSON, M.D.

Mr. C. Davidson rightly feels aggrieved. But his first duty is to write a statement of the facts to Mr. Hankins, who may either be misinformed or uninformed of them, or, on Mr. Davidson remonstrating, may make the *amende honorable*. It is certainly the duty of a medical man called, in an emergency, to attend the patient of another medical man, to retire in favour of the regular attendant. When a medical man does not act so, it is right in the first instance to assume that he acts in ignorance of the facts of the case, and not of its ethics.

Agricola will find the late Professor Dick's publications worth reading.

SMALL-POX DURING PREGNANCY.

To the Editor of THE LANCET.

SIR,—Having noticed in one of your numbers some time ago that you wished those who might meet with cases of small-pox occurring during pregnancy to state their experience, I take the liberty of sending you a short account of a case which lately came under my notice.

Mrs. D, about eight months pregnant, was on the 7th instant seized with great feverishness, pains in the back, loins, and head. On the 8th, sickness and vomiting came on. On the evening of the 8th and morning of the 9th, a papular eruption appeared upon the forehead and face. On the 10th, the eruption had spread over the whole body, very thick on the face and hands, but distinct in form; the sickness and pains in back, loins, and head being greatly relieved upon the appearance of the rash. Early on the morning of the 11th, I was hastily summoned to the patient, who was again suffering from great pain in the back, and had been for some hours. The pains this time I found were due to labour, and the patient was delivered of a fine child, but still-born. There were no signs of an eruption upon the child. No untoward symptom occurred, excepting that during the following night epistaxis set in at intervals; otherwise the patient continued daily to improve, and is now nearly well.

Yours obediently,

Llanfyllin, April 24th, 1871. J. T. JONES, M.R.C.S. Eng.

P.S.—I may just add that small-pox rages epidemically in this neighbourhood at present.

Dr. George Johnson.—We have received a letter from Dr. George Johnson in answer to Dr. Dickinson's letter on the treatment of acute albuminuria, both of these letters arising out of one from Dr. Wilks in defence of his views on scientific therapeutics. Both Dr. Johnson's views and Dr. Dickinson's are now before the profession, and it appears unnecessary to prolong an incidental controversy in which it seems to us the difference is likely to be unduly magnified by prolonged correspondence.

EPSOM COLLEGE.

To the Editor of THE LANCET.

SIR,—Apropos of my letters in your journal of the 15th inst. and July 3rd, 1869, touching the election of Foundation Scholars and Pensioners, a case in point has come under my immediate observation this day.

An orphan is now a candidate for the *third time* (with forty-two others from first to fifth application). The friends of this boy tell me they scarcely expect to succeed this year, and that these *three* canvassings will cost about £120! or £40 a year! Surely this must speak more than volumes by writing, to show how very faulty is the present system of election. Supposing he fail this year, and try another, the expenses will have amounted to nearly four years' premiums for his education and maintenance as scholar.

Your obedient servant,

East Rudham, April 21st, 1871. FRED. MANBY.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Buchanan, Glasgow; Mr. T. Holmes; Prof. Brazier, Aberdeen; Mr. Spencer Wells; Mr. Gay; Mr. Rendle; Dr. John Matthews; Mr. T. Bond; Mr. Collette; Dr. Spalding; Mr. Skene; Dr. Mackeson; Mr. Harrison; Mr. G. Eames, Whittlesea; Dr. Coombs, Castle Carey; Mr. Sinclair; Mr. Woolley, Darlington; Mr. E. Sankey, Lincoln; Dr. Davies, Wrexham; Dr. Thomson, Higham Ferrers; Dr. Evans, Abergavenny; Mr. C. Lester, Warwick; Dr. Palmer, Burton; Mr. Sant; Mr. J. Garrett; Dr. Wolfe; Mr. Anderson, Belfrow; Mr. Scott; Mr. Peterson; Mr. Hales; Mr. Macklin, Enfield; Mr. Booth; Mr. Rock; Mr. R. Sharp, Truro; Mr. Williams, Brecon; Dr. Hay; Mr. Whitwell, Shirley; Mr. Blake; Mr. Davies, Boyle; Dr. Dale, Plymouth; Dr. Manning, Gladesville, N.S.W.; Dr. Pringle, Parramatta; Mr. Cornish, Madras; Dr. Woodward, Worcester; Mr. Denny; Dr. Rose, Hampstead; Mr. Barker; Dr. Wyle, Leamington; Mr. Ross, Budleigh; Mr. Jessop, Leeds; Dr. Hair, Colchester; Mr. Andrew; Dr. H. Harris, St. Andrews; Dr. Pigg, Withington; Dr. Millson, Dorington; Dr. Ogston, Aberdeen; Mr. Gant; Mr. Sparks, Vienna; Dr. O. Royle; Dr. G. Johnson; Dr. Ryley, Woolwich; Mr. Dowan; Mr. Brown, Marland; Mr. Morris, Salford; Mr. Pyke; Mr. Simpson, St. Ives; Mr. Lawrence; Mr. Jones, Llanfyllin; Dr. Strong, Croydon; Mr. Denne, Stotford; Dr. Eaton, Airdrie; Mr. R. M'Dowell, Perth; Mr. Whelpton; Dr. Haughton; Mr. Wood, Darlington; Mr. Evans, Sandwich; Mr. Brand, Atherstone; Mr. J. C. Leach, Blandford; Dr. Mackintosh, Callington; Mr. F. Manby, East Rudham; Mr. Knowle; Mr. Bewley; Dr. Husband; Mr. T. Mason; Dr. Littlejohn; Mr. Hern; Mr. Vincent; Mr. Lilley, Atherstone; Mr. Lewis; Mr. Gibson, Kirkcudbright; Dr. Nind, Torquay; Messrs. Arnold and Sons; Mr. Lang, Epsom; Surgeon Wolseley, 5th Fusiliers; Dr. Atkinson; Mr. Pelling; Dr. Willis, Barnes; Mr. Hensler; Mr. Reeves; Mr. Knight; Dr. Gayton, Homerton; Mr. Bower, Henley; Mr. Date, Crewkerne; Dr. Davies, Southport; Mr. Nicholson; Mr. Walker, St. Andrews; Mr. Graham, Charlton; Dr. Jameson, Edinburgh; Mr. Simmonds, Hanley; Mr. Haynes, Dewsbury; Mr. F. Smith; Dr. Nevison, Castle Douglas; Mr. Rutherford, Aylesbury; Kappa; H. C.; Delta; M.R.C.S.; T. A. B.; Chemist; Arcanum; W. B.; Odonto; One of the Disappointed Candidates; Good Enough; M.B.; Agricola; Medicus; &c. &c.

Australian Medical Gazette, Penrith Observer, Melbourne Daily Telegraph, Leamington Advertiser, St. Andrews Citizen, Australian Medical Journal, Gateshead Observer, Food Journal, & Melbourne Argus have been received.

Medical Diary of the Week.

Monday, May 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. Annual Meeting.
MEDICAL SOCIETY OF LONDON (Hanover-square Rooms).—8 P.M. Annual Oration, by Dr. W. Cholmeley; after which a Conversazione will be held.
ANTHROPOLOGICAL INSTITUTE.—8 P.M.

Tuesday, May 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. W. Pengelly, "On the Geology of Devonshire, especially of the New Red Sandstone System."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following amongst other Specimens will be exhibited:—Dr. Murchison and Dr. Cayley: Post-mortem appearances in a Case of Paralysis Agitans. Dr. Dickinson: On the Composition of the Renal Calculi in the Museums of London. Mr. Gay: Subclavian Aneurism; Myxoma. Dr. J. R. Bennett: Cancerous Disease of the Lung. Dr. D. Powell: Cases of Fatal Hæmoptysis. Mr. H. Arnott: Malignant Osteoid Tumour of the Fibula.

Wednesday, May 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 3 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Wiltshire, "On Tetanus after Abortion."—Dr. Meadows, "On Hæmatocele."—Dr. Playfair, "On a Case of Sudden Death after Delivery."
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Dr. Maddox, "On the Structure of Lepidopterous Scales as bearing on the Structure of Lepidocyrtus curvicollis."—Mr. B. T. Lowne, "On the Foot of Dityscus marginalis."

Thursday, May 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Sound."
HARVEIAN SOCIETY OF LONDON.—7½ P.M. Special Council Meeting.—8 P.M. Mr. Berkeley Hill, "On the Treatment of Surgical Inflammation by Counter-irritation."

Friday, May 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—9 P.M. Mr. W. R. S. Ralston, "On Russian Folk-Lore."

Saturday, May 6.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Lockyer, "On the Instruments used in Modern Astronomy."

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